DAVID C. SHEPARD

vs.

NORTHERN PACIFIC RAILWAY COMPANY, ET AL.

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UNITED STATES CIRCUIT COURT,

DISTRICT OF MINNESOTA,

THIRD DIVISION.

(In Equity.)

DAVID C. SHEPARD,

Complainant,

vs.

NORTHERN PACIFIC RAILWAY COMPANY, GEORGE T. SIMPSON, IRA B. MILLS, CHARLES F. STAPLES, CHARLES E. ELMQUIST, E. A. EVARTS, O. J. WHITEMAN, J. RUMSEY REEVE, ACHILLE MICHAUD, CHARLES MICHAUD AND ADOLPH MICHAUD,

Defendants.

APPEARANCES:

HOW, BUTLER & MITCHELL,
Solicitors for Complainant.

EDWARD T. YOUNG, Attorney General,
THOMAS D. O'BRIEN and EDMUND S. DURMENT,
Solicitors for members of the Railroad and Warehouse Commission, et al.

VOLUME 2.

CHAS. E. OTIS, Master.

GEO. N. HILLMAN, Reporter.

At the Comptroller's office of the Northern Pacific Railway Company, on Friday morning, July 24, 1908, the hearing was resumed.

H. A. GRAY,

recalled for further cross-examination, testified:

Mr. How: The witness produces certain exhibits called for by counsel for the Defendants, the first being a statement of mileage of branch roads included in 3,029.48 miles of branch lines, as per annual report of June 30, 1907, that were in the possession of the Northern Pacific Railroad Company at the time of the issue of the consolidated mortgage bonds in December, 1889, showing the original name of the company constructing and owning the roads, and the mileage as of June 30, 1889; the second is a statement showing the disposition of the Northern Pacific Railroad Company consolidated mortgage bonds as the result of the reorganization of September 1, 1896. (Handing same to counsel for defendants.)

I will state that Mr. Darling has advised me that the statement of the cost of a track-mile in Minnesota, in detail, which he agreed to furnish, will take him three weeks, and I have told him he need not attend this morning but may defer his attendance until he gets that statement ready.

By Mr. DURMENT:

Q. In the examination of Mr. Darling he was requested to furnish certain information with reference to the mileage of the Northern Pacific Railway Company on June 30, 1907, and he produced such information in the form of a schedule or statement which was received in evidence as Exhibit S—Darling; on the last sheet of that exhibit, being a summary of the preceding sheets was the description of property owned, including

branches, 3,029.48 miles main track. Mr. Darling stated that the information as to how much of that mileage, and what it consisted of, which was owned by or in the possession of the Northern Pacific Railroad Company at the time of the making of the consolidated mortgage in December, 1889, would have to come from the records of your office; thereupon you were requested to produce a detailed statement showing which of the branch roads included in that mileage of 3,029.48 miles were owned by the Northern Pacific Railroad Company in 1889, at the date of the issuance of the consolidated mortgage. Have you furnished such a statement?

A. I have.

Q. Is Exhibit T—Darling that statement?

A. That is the statement. May I add, that in this statement there are two roads, shown by a star, as acquired in 1890. They were part of the same transaction, and while the bonds were dated in December, 1889, the issue of them ran over into the following year, and I thought that your purpose would be better answered by including those two roads.

Mr. HOWE: I think the witness has testified, probably inadvertently, that the lines shown in this statement, Exhibit T—Darling, were owned by the Northern Pacific Company at the time of the date of the consolidated mortgage.

WITNESS: If I used the word "owned" (I wasn't aware that I did), I wish to withdraw it. The expression I have used in the statement itself is "in the possession of." I don't mean by "in the possession of" owned, as owning the fee or anything of that kind.

Q. Mr. Darling's statement, Exhibit S, which I now show you, has it marked "owned 3,029.48."

A. They are owned now, but the lines were not all owned in 1889, but they came into the possession of the Northern Pa-

cific Railroad Company by lease or otherwise.

Mr. How: They were being operated by the Northern Pacific?

WITNESS: Yes.

Q. Would it be a great deal of trouble to take that exhibit and indicate on it which of the lines were owned and which ones were in the possession under lease?

A. No, it wouldn't be much trouble.

Q. Well, I will ask you to do that, some time to-day or to-morrow, at your convenience.

A. I will have that done.

Mr. DURMENT: And then we will offer that in evidence.

Q. You were asked at a former session to furnish a statement showing the disposition of Northern Pacific Railroad consolidated mortgages as the result of the reorganization September 1, 1896.

A. I was.

Q. I show you Defendants' Exhibit U—Gray and ask you if that is such statement?

A. That is the statement.

Q. I find on page 516 of the testimony this statement by me: "We would like that you would prepare a statement showing just what became of these between sixteen and seventeen millions of consolidated bonds or consols which you testified about this morning, that were put up as collateral security for various matters except the $165,000 that was in the hands of the Company, and what securities in the way of stocks or bonds, or other evidences of debt, were issued in place of them, and to whom they were issued and what became of them." Is this statement Exhibit U furnished pursuant to that request?

A. It is.

Mr. DURMENT: We offer this Exhibit U in evidence. And

the other exhibit (T) that was produced this morning I will offer later, when he has given us the additional information we have asked for this morning.

Mr. How: I object to it (Exhibit U) as immaterial. I regret there is no way of determining the fact as to whether this mass of testimony which they promise now to offer is material to any issue in the case, but I want to re-assert my opinion that what bonds have been issued for, or what stock has been issued for, has no bearing upon the present valuation of the property devoted to the public use upon which we claim the corporation is entitled to a return.

The MASTER: The objection will be made a matter of record. Proceed.

By Mr. O'BRIEN:

Q. Mr. Gray, in Exhibit 13, you have presented what I understand to be a statement as to the cost of the construction of the Northern Pacific Railway System as it exists at present, that is, up to April 30, 1908.

A. It is the cost of the property; it is not in all its details cost of construction, except in the sense that it is the cost to the respective companies of the property represented. For instance, the first item in the statement does not pretend or claim to be cost of construction.

Q. The statement Exhibit 13 aggregates $369,252,755.73?

A. Yes.

Q. Do you give that as the cost of the construction of the property owned by the Northern Pacific Railway Company, used for railway purposes?

A. I give it as the cost of the property to the Northern Pacific Railroad and the Northern Pacific Railway Company, respectively. I have already explained, in more or less detail, in

regard to certain of the items; for instance, it would not be possible to make up a detailed statement of cost of construction such as, for instance, grading and track-laying, and rails and ties and so on, which makes up the first item which reads "property acquired under decree of foreclosure September 29, 1875".

Q. Well, I want to know whether or not you claim Exhibit 13 is a statement of the cost of the Northern Pacific Railway Company and its predecessor of the construction and equipment of that road and its property actually used for railway purposes.

A. When you use the term "actually used for railway purposes," there may have been some right-of-way on which there were shanties or residences which may have been rented, or something of that kind. If you mean the question in a broad, large way, I would say, yes; but there may be in this property some property that is not absolutely necessary for railway purposes, but only to a comparatively small extent.

Mr. How: That is not *now* absolutely necessary.

Q. Exhibit 15, Mr. Gray, seems to be a similar statement, in which the different classes of expenditures are segregated; is that correct?

A. Yes.

Q. And it is stated that this exhibit is as shown by reports made to the Interstate Commerce Commission to June 30, 1907?

A. Yes.

Q. The Company has also reported to the Railroad Commission of the state of Minnesota, has it not?

A. Yes.

Q. And those reports are the same?

A. I believe so.

Q. So that Exhibit 15 is a statement of this cost, in your judgment, as shown by the reports to the public authorities,

both federal and state?

A. Yes, sir.

Q. The Northern Pacific Railroad Company and its successor, the Northern Pacific Railway Company, have reported to the Railroad & Warehouse Commission of the state of Minnesota, every year since 1873, have they not?

A. I don't know.

Q. Well, as far back as your knowledge goes they have made reports?

A. Yes.

Q. Now, Mr. Gray, the first item appearing in Exhibit 13 is "Property acquired under decree of foreclosure September 29, 1875, $65,610,825.92"; will you please explain what you mean by "property acquired"?

A. At the time of the foreclosure, the Railroad Company owned certain property, for instance, 555 miles of operated railroad; it owned franchises, telegraph lines, boats, uncompleted roads, money expended in surveys, reconnaissances, organization expenses; it had lands granted by Congress; and all the property that it had at that time as affected by subsequent credits on account of sales of land, and so on, is represented by this sixty-five million dollars.

Q. But that sixty-five million dollars does not purport to be the expenditures of the Company for construction of road and equipment up to the time of the reorganization in 1875?

A. It does not.

Q. Have you any means of determining what those expenditures amounted to up to the time of the foreclosure of 1875?

A. I have not.

Q. Mr. Gray, I hand you a bound volume of the reports of railroad companies to the state of Minnesota, and call your attention to the report marked "Report of the Northern Pacific

Railroad Company for the year ending 30th of June, 1874," and further call your attention to the fact that that report purports to be sworn to by L. W. Ford, Auditor of the Northern Pacific Railroad Company, on the 11th day of December, 1874, before John Davidson, notary public, Minnesota, notarial seal attached; I now ask you to turn to page 8 and read into the record the cost and value of the road and equipment as stated in that report.

A. This report (of which I know nothing whatever) states that the total cost of construction and equipment was $21,358,416.11.

Q. Will you separate, if they are separated in the report, construction and equipment?

A. Construction is given as $18,919,069.86; equipment is given as $2,434,346.25.

Q. I now call your attention to the report of the Northern Pacific Railroad Company for the year ending June 30, 1875, made to the State of Minnesota, and verified by Charles W. Mead, general manager, before E. T. Williams, notary public, on the 13th day of October, 1875, and I ask you to turn to page 3 of that report and read into the record the cost of construction and equipment as therein given.

A. This report shows cost of construction, entire line, $18,919,069.86; cost of equipment, $2,434,346.25; total $21,353,416.11.

Q. Under the testimony given by you as to the total bonds issued up to that date, the actual construction and equipment account could not be much more than that, could it?

A. It could have been a few millions more than that, I think.

Q. It might have been a few millions more than that?

A. Yes.

Q. But by "a few millions" you mean less than five?

A. It might possibly have been five.

Q. I now hand you the report of the Northern Pacific Railroad Company, made to the State of Minnesota for the year ending August 31, 1873, verified by Loree William Ford, on the 20th of December, 1873, before A. J. Eggleston, Railroad Commissioner, and call your attention to page 5 and ask you to read into the record the statement contained in that report as to the amount of cash realized from the sale of mortgage bonds.

A. The Report shows from sale of mortgage bonds $22,766,923.

Q. Will you please read the entry, so as to show whether that purports to be the total receipts of cash from sale of mortgage bonds up to the date of that report?

A. I have read that.

Q. Does that statement there purport to be a statement of the total cash received from the sale of bonds from the organization of the company?

A. I would so take it.

Q. Have you in your possession the annual report made to the stockholders of the Northern Pacific Railroad Company for the year 1876?

A. I have.

Q. Will you produce it.

Witness produces book.

Q. I now call your attention to the report of the Northern Pacific Railroad Company to the State of Minnesota for the year ending June 30, 1876, verified by the oath of George G. Sanborn, general business agent, and call your attention to page 3 and ask you to read into the record the entry there as to the cost of construction and equipment. In the first place, before you do that, I will ask you, is there any sum stated as the cost

of construction and equipment?

A. I see no figures on this page except the printed ones.

Q. Will you read the explanatory note?

A. There is a note at the foot of this page which says, "All the railroad property, equipment, rights and franchises of the Northern Pacific Railway Company, were purchased and acquired by the present stockholders as an entirety for the former bondholders assenting to the plan of reorganization, at sale under foreclosure of the mortgage, and not in parcels."

Q. I now call your attention to the condensed general balance, found on pages 34 and 35 of the report of the Northern Pacific Railroad Company to its stockholders in the year 1876, and ask you to give the cost of construction and equipment as stated in that report.

A. I have examined this report before, and I am utterly unable to give you any such figures from this report. It does not purport to show cost of road and equipment.

Q. Is there an item under the heading "Cost of construction" in that condensed balance-sheet?

A. I see no such item.

Q. Is there an item "Railroad buildings and fences"?

A. There is.

Q. Will you read that item?

A. Railroad, buildings and fences $18,923,119.50.

Q. Is there an item marked "Equipment"?

A. There is.

Q. Read that.

A. $1,093,974.98.

Q. The first item is "Railroad, buildings and fences, $18,923,119.50," is it not?

A. Yes.

Q. The next item is "Equipment, $1,093,974.98"?

A. Yes.

Mr. O'BRIEN: I hand the copy to the Master.

The MASTER: I appreciate how that reads from the way you read it.

Q. Will you please take a piece of paper, Mr. Gray, and keep track of those amounts from now on?

Mr. HOW: I have an idea the witness has enough to do without keeping books for them as they go along. They ask him to keep account of these figures as he goes along.

Mr. O'BRIEN: The witness has not objected, Mr. How.

Mr. HOW: I suggest that he do object.

Mr. O'BRIEN: Mr. Gray is a better judge of his limitations than you are.

Mr. HOW: I would rather he would give his attention to his testimony.

The MASTER: I can see no objection to the witness setting down figures as requested.

Mr. HOW: If he wants to.

Mr. O'BRIEN: We shall want to ask the total, and it will simply have to come from the testimony given. This is not a matter of criticism of Mr. Gray. He has given his statement of his books, I have no doubt, perfectly truthfully; now, we are getting the facts from other information.

WITNESS: What was the first item?

Q. The total was $18,923,119.50, and $1,093,974.98. I now show you the report of the Northern Pacific Railroad Company to the State for the year ending June 30, 1877, verified by George Stark, vice-president, and George E. Beebe, treasurer, and turning to page 3, I ask you to state whether or not any cost and value of road and equipment is given there.

A. There is not.

Q. What is the explanatory note?

A. All the railroad property, equipment, rights and fran-

chises of the Northern Pacific Railroad Company were purchased and acquired by the present stockholders as an entirety for the former bondholders assenting to the plan of reorganization at sale under foreclosure of the mortgage, and not in parcels."

Q. Turning to page 13, I ask you to state whether or not any expenditures during the fiscal year ending June 30, 1877, on account of construction or equipment, are shown, and if they are, to read them into the record.

A. They would not be shown on that page, anyway.

Q. Well, are there any shown there?

A. There are none shown there.

Q. Page 14, Mr. Gray, I think is the one I should have referred to. Are there any such expenditures shown, and if so, please read them into the record?

A. There is an item shown of "Construction account for the year, $9,064.78; additional equipment for the year, $280.66" May I make a remark?

Q. Why, certainly

A. What I was going to say is, I judge from this statement, as it appears here, that this does not purport to be construction made by the issue of new capital rather than construction made from the earnings of the Company.

Q. That is true. It shows that, but we simply want to show what construction was made. Is there any other or different construction shown in that report?

A. The report is incomplete, not showing a balance-sheet, and in so far as I can see, there is no statement of construction other than that shown on page 14.

Mr. DUMMENT: And which you have read into the record?

WITNESS: Which I have read into the record.

Q. I now call your attention to the report to the stockholders for the year ending June 30, 1877, and turning to pages 16 and 17, marked "Condensed balance" I call your

attention to the item commencing "Construction" and ask you to read that item.

A. "Construction, as per last report, $18,923,119.50; since last report, $541,069.81; a total of $19,464,189.31."

Q. Will you please add those figures $541,069.31 to your table there? Turning again to the report to the stockholders, I ask you to state the total cost of equipment as given in that report.

A. The entry is simply "Equipment, $1,081,693.86."

Q. That is $12,281.12 less than the equipment stated for the previous year, is it not?

A. Thereabouts.

Q. I now call your attention to the report of the Northern Pacific Railroad Company for the year ending June 30, 1878, verified by Mr. Sargent, made to the State of Minnesota, and turning to page 4, under the heading "Cost and Value of Road and Equipment," I ask you to read into the record any entries made there, or any statement explaining the absence of any.

A. I find a statement in reply to the question: "If the road was not built by the present owners, state the cost of road and equipment to them," "Unknown until all the bondholders who shall assent to the plan of reorganization shall surrender their bonds. All the railroad property, equipment, rights and franchises of the Northern Pacific Railroad Company were purchased and acquired by the present stockholders as an entirety for the former bondholders assenting to the plan of reorganization at sale under foreclosure of the mortgage, and not in parcels."

Q. Will you please examine that report and ascertain whether it contains any entries showing cost of construction during the preceding year?

A. There is no balance-sheet in which such cost should be stated. I find on page 14, under head of "Items in addition to operating expenses," (which is manifestly intended to be

payments out of the earnings of the Company) "Construction account for the year, $1,573.89; additional equipment during the year, $29,735.41."

Q. I now call your attention to the condensed general balance in the report to the stockholders for the same year, and found on pages 18 and 19 of that report, and ask you to read the entry there contained as to construction.

A. "Construction, as per last report, $19,464,189.31; since last report, $124,461.13."

Q. Making a total construction—

A. $19,588,650.44.

Q. And total equipment is given as what?

A. I find the word "Equipment, $1,115,369.55."

Q. Will you please make an entry of those last figures?

A. That means figuring. Cost of equipment is not segregated. You have got it all there, what is the use of my doing it? Let me put a check-mark against your figures.

Mr. DURMENT: That will save him work and if there is any mistake in our figures he will discover it as he goes along.

Q. I now call your attention to the report of the Northern Pacific Railroad Company to the State of Minnesota for the year ending June 30, 1879, and ask you to read into the record the entry on page 4, under the heading, "Cost and Value of Road and Equipment."

A. "Purchased August 12, 1875, under decree of foreclosure of the mortgage of the former organization."

Q. Now, will you please examine the report and see whether or not there is any statement of expenditures during the preceding year for construction or equipment?

A. Under the head of "Payments in Addition to Operating Expenses" I find "Construction account for the year, $9,314.75; additional equipment during the year, $21,638.25."

Q. Now, will you please verify the figures there?

Witness does so.

Q. I now call your attention to the report of the Northern Pacific Railroad Company to the State of Minnesota for the year ending June 30, 1880, as found in a printed volume of the files of the Railroad & Warehouse Commission of this state, and call your attention to the heading marked "General balance July 1, 1880," and ask you to read into the record the first entry under the heading Assets.

A. "Property acquired under decree, $90,549,557.55; construction, cost of new road in bonds and stock at par, $5,147,602.39; equipment, $1,243,531.05."

Q. At this time I will ask you whether or not the item with which you begin your statement Ex. 13, to-wit, $65,610,825.92, is not arrived at by taking as the cost of the property at the foreclosure of 1875 this amount found in this report of $90,549,557.55 and crediting to it certain sales from lands and other credits until the amount of your statement is reached.

A. I would answer that with "yes" if I were sure that this 90 millions was the original amount that was shown after the books were first started, but what you are getting at is true.

Q. That is, it is true that in stating as the cost of construction at the time of the foreclosure of 1875, 65 odd million dollars you have taken a sum which some of your predecessors fixed as the total value of the property and have credited that with certain land sales and other credits?

A. They have done it.

Q. They have done it, yes. Well, I mean that has been done.

A. Yes, that has been done.

Q. And in no sense do you claim that it means the actual sum paid out for construction of road, erection of buildings and purchase of equipment?

A. I have been careful to say so repeatedly.

Q. You have given us what the report to the State shows for construction during that year. Now, turn to the stockholders' report for the same year, which you have in your hand,

and give the amount expended during the preceding year for construction and equipment.

A. I find the same amount as in the other report, that is, the report of the State.

Q. Now, will you please ascertain whether or not something was not taken from income for improvements and betterments and ascertain that?

A. That would be too much.

Q. Add to this sum which you state is given for construction the amount taken from income and applied to improvements and betterments found at page 43 of the report, and state what the total of those two amounts would be.

A. $5,450,532.66. This amount does not include equipment.

Q. What was the amount of equipment?

A. The amount of equipment, stated in the condensed balance sheet, was $1,243,531.05.

Q. What was the increase that year?

A. $212,032.72, as shown on page 44.

Q. And that would make a total equipment account of what?

A. The total equipment to that date is shown as $1,349,040.52.

Q. That was for the year ending June 30, 1880, was it not?

A. Yes.

Q. In which this large expenditure for construction and equipment is shown?

A. Yes.

Q. I now call your attention to the annual report of the Northern Pacific Railroad Company to the stockholders, dated September 24, 1879, and I ask you to read into the record the last paragraph of that report, page 5.

A. "The operating expenses have been very large by reason of the great outlay necessary on replacement and repair of tracks, bridges, trestles, depot buildings and equipment, all of

which has been charged to that account, it being provided in the plan of reorganization that all 'expenses of repairing or replacing the road, its appurtenances, equipments or other property so that the same shall be in high condition and of providing such additional equipment as the said Company shall deem necessary' shall come out of the earnings."

Q. Will you read the first sentence in the next paragraph, being the first paragraph commencing on page 6?

A. "It is nearly six years since the work of construction was suspended."

Q. I now call your attention to the report to the State of Minnesota of the Northern Pacific Railroad Company for the year ending June 30, 1881, verified by M. P. Martin, December 8, 1881, and call your attention to the entry on page 4 under the heading Cost and Value of Road and Equipment and ask you to read it into the record.

A. "'Purchased August 12, 1875, under decree of foreclosure of the mortgage of the former organization."

Q. No further information appears under that heading, does there?

A. No.

Q. Now, does this report show the amount expended or incurred for construction and equipment during the year ending June 30, 1881?

A. There is no balance-sheet and I don't see any figures elsewhere in the report. While there is no construction account, proper, I find, under the head of Payments in Addition to Operating Expenses, "Improvements and betterments, $188,252.77; additional equipment during the year, $850,883.89.

Q. Will you turn to the stockholders' report for the same year and give us the amount shown to have been expended during the year ending June 30, 1881, for construction and equipment? That was one of the large years, was it not?

A. I don't know. I think so.

Q. 1881?

A. Yes. Did you refer to the balance-sheet?

Q. Yes, the construction account as appearing on page 42.

A. The construction is shown as $8,756,987.14.

Q. What is the total of construction and betterments given in the report to the stockholders during the preceding year?

A. The total of construction and improvements and betterments as shown by pages 41 and 42 was $9,361,577.34.

Q. Now, the total new equipment.

A. The total new equipment is $1,084,416.51.

Q. Now, on page 42 of the report to the stockholders last referred to, after the total construction account for the year ending June 30, 1881, appears an item which I wish you would read.

A. "Expended in previous years, $5,147,602.39."

Q. And the next.

A. "Total expenditures to date, $13,904,589.53."

Q. You understand that to refer to the total expenditures for construction to the date of that report and since the reorganization, do you not?

A. It is a very blind statement, in my judgment.

Q. Well, you don't think it refers to anything before the reorganization?

A. I do not.

Q. So it cannot refer to anything but the items since the reorganization?

A. That seems evident.

Q. I now call your attention to the report of the Northern Pacific Railroad Company to the State of Minnesota for the year ending June 30, 1882, as found in a printed volume of the files of the Railroad & Warehouse Commission, and I ask you to read into the record the statement contained in that report under the heading Cost and Valuation of Road and Equipment.

A. "Impossible to give the above information in form called

for. Property acquired under decree of foreclosure, together with the amount expended since for construction, improvements, equipments, etc., is represented on the books of the Company by $127,411,622.42."

Q. Now, the report gives a statement of expenditures for the preceding years, at page 208 of the printed volume, does it not?

A. It gives "Payments in addition to operating expenses in Minnesota."

Q. Amounting to how much in total?

A. Total payments in addition to operating expenses, $2,625,669.14.

Q. That is the only expenditure found in that report in addition to operating expenditures?

A. Yes.

Q. Now, will you please turn to the report of the Company to the stockholders for the same year, the year ending June 30, 1882, and read into the record the amount stated in that report to have been expended during the year ending June 30, 1882, for construction, improvements and betterments?

A. $16,230,657.45.

Q. Which checks with this statement?

A. Yes, sir.

Q. And for equipment?

Mr. HOW: Don't you think you had better have this statement you are referring to marked? I suppose you intend finally to offer it.

Mr. O'BRIEN: Yes.

Mr. HOW: But you are talking about that in the record all the time.

Mr. O'BRIEN: I would be very glad to. I will, after this question.

A. $2,138,956.26.

Q. Mr. Gray, you have had before you Defendants' Exhibit

V—Gray for the purpose of verifying the statements contained in that exhibit as shown by these reports to which you have referred, have you not?

A. Yes, sir.

Q. And so far have checked the items appearing on Exhibit V?

A. My check-marks show what I have checked.

Q. So far the items agree?

A. Yes, sir.

Q. Now, will you please state the total cost of construction and equipment as shown by the tabulation Exhibit V—Gray on June 30, 1882?

A. $55,213,145.93.

Q. Which was the same date of the report made to the Railroad & Warehouse Commission, in which the value of total cost and value of construction and equipment was given at $127,000,000 and some odd thousands?

A. Yes, sir.

Q. I now hand you the report of the Northern Pacific Railroad Company to the Railroad & Warehouse Commission of the state of Minnesota for the year ending June 30, 1883, verified by M. P. Martin November 13, 1883, and ask you to read into the record the statement appearing on page 4 under the heading Cost and Value of Road and Equipment.

A. "Cost of construction, entire line by present Company, $53,010,148.60; cost of present equipment, (applying to 1701 miles of road) $6,063,415.20; total cost of construction and equipment, $59,073,563.80." To the question, "Is your construction account closed?" the answer is, "It is not." To the question, "If the road was not built by the present owners, state cost of road and equipment to them," the answer is, "Impossible." To the question, "The value of all other property owned by corporation," the answer is, "Railroad equipments

and lands are represented on Company's books by $149,697,519.80."

Q. Is there in that report a statement of the construction account and equipment account for the previous year?

A. The only item shown is under the head of Payments in addition to Operating Expenses, "Construction account for the year, $19,422,720.07; additional equipment during the year, $1,596,511.38."

Q. Will you turn to the report to the stockholders of that year?

A. Yes.

Q. And give the amount of construction, improvements and betterments during the preceding year as shown by that report?

A. $21,436,686.68.

Q. Which agrees with the statement, Exhibit V?

A. Yes.

Q. And equipment?

A. $1,604,016.37?

Q. Which also agrees with Exhibit V?

A. Yes.

Recess till 2 P. M.

AFTERNOON SESSION.

Q. I now show you the report of the Northern Pacific Railroad Company to the state of Minnesota for the year ending June 30, 1884, verified by T. F. Oakes, General Manager, and J. A. Barker, General Auditor, on the 6th day of November, 1884, as found in the printed copy of that report in the volume containing the reports to the Railroad & Warehouse Commission and a part of the files of that commission; on page 236 of the printed volume is found a heading Cost and Value of Road and Equipment, and I ask you to read the first item in that statement.

A. "Cost of construction and equipment since reorganization October, 1875, $77,206,588.59; cost of present equipment applying to 1,862.5 miles of road owned, and cost of present equipment applying to 2,444.1 miles of road operated June 30, 1884, $11,660,047.69; total cost of construction and equipment, as above, $77,206,588.59; average cost of road and equipment per mile, (1,378.73 miles) $55,998.12. The value of all other property owned by the corporation, railroad, equipment and lands are represented on the Company's books by $168,907,607.15." It is evident that the first item there is included in this.

Q. Why is it evident?

A. It says that railroad equipment and lands are represented on the Company's books by this amount; which is a considerably larger amount than the amount shown as cost of construction and equipment.

Q. So that the first item "Cost of construction and equipment since reorganization" in 1875, is included in the last item which you give?

Mr. HOW: If you don't know, Mr. Gray, I would rather you would not testify.

WITNESS: I don't know.

Q. Is there contained in that report any statement of the amount expended for construction and equipment during the year ending June 30, 1884?

A. Under the head of Payments in addition to Operating Expenses I find, "Construction account for the year, $12,783,881.23; additional equipment during the year, $5,594,672.49."

Q. Will you now turn to the report to the stockholders for that year?

A. The total construction for that year is stated as $9,182,948.73; the total equipment is stated as $5,594,672.49.

Q. Those are the amounts that appear in Exhibit V?

A. Yes.

Q. The last amount you have given?

A. Yes.

Q. What is included in the report to the State which goes to make up the twelve million dollars for construction instead of nine millions, as given in the report to the stockholders?

A. I don't know.

Q. Will you please examine and ascertain, from either of those reports, whether there is not a discount on securities included?

A. Well, if it is included it would be included in the report to the State, and there are no further details given in this report to the State. I don't think that, from either report, I could ascertain that fact. The amount shown me by Mr. Hillman, on page 7, of the President's report, added to the amount stated by me, makes the amount reported to the Railroad Commission.

Q. What is the item in the President's report to which your attention has been called?

A. Discount on bonds.

Q. Amounting to how much?

A. $3,600,932.50.

Q. If that amount is added to the amount of $9,182,948.73, found as the amount expended for construction in the report to the stockholders, it will amount to $12,783,881.23—the amount found in the report to the State, at page 248?

A. That is right.

Q. As construction account for the year?

A. That is right.

Q. And we have, in Exhibit V, taken the amount found in the stockholders' report, to-wit, $9,182,948.73.

A. Yes.

Q. I now hand you report of the Northern Pacific Railroad Company to the State of Minnesota for the year ending June 30, 1885, verified by Messrs. T. F. Oakes, Vice-president, and

J. A. Barker, General Auditor, August 29, 1885, and ask you to read into the record the items on page 5 under the heading Cost and Value of Road and Equipment.

A. Cost of right-of-way entire line, cannot give; cost of right-of-way in Minnesota, cannot give; cost of construction and equipment since reorganization October, 1875, $81,045,366.51; cost of construction in Minnesota cannot give; cost of present equipment applying to 1,999.2 miles of road owned, or 2,660.7 miles of road operated, $11,596,346.16; cost of all real estate used exclusively in operating the road, cannot give; cost of all fixtures and conveniences for business of road, cannot give; total cost of construction and equipment entire line, as above, $81,045,366.51; average cost of road and equipment per mile, cannot give; total cost of road and equipment in Minnesota, cannot give; average cost of road and equipment per mile in Minnesota, cannot give. "Is your construction account closed?" "No." "If the road was not built by the present owners state cost of road and equipment and all other property to them." "$155,080,386.77; the value of all property owned by the corporation, railroad equipment and lands, are represented on the Company's books by $155,080,386.77."

Q. Will you please state whether or not this report gives a statement of the amount expended during the year ending June 30, 1885, for construction and equipment.

A. Under the head of Payments in addition to Operating Expenses I find, "Construction account for the year, $3,770,591.85; additional equipment during the year, $68,186.07."

Q. Now, will you please turn to the report to the stockholders of that year, and state the amount expended for construction during the year ending June 30, 1885, as shown by the report to the stockholders?

A. The amount expended for construction, as shown by the report, on page 32, is $3,770,591.76.

Q. Did that include a discount upon bonds?

A. Yes.

Q. How much was that discount?

A. It does not state specifically what the discount was in the statement from which I have quoted, but my attention is called, by Mr. Hillman, to a statement of resources and disbursements on page 10, in which account of disbursements for the year I find an item "Discount on bonds" of $845,140.91, which if deducted from the amount of $3,770,591.76, stated by me, would leave a balance of $2,925,458.05, as shown on Exhibit V.

Q. The equipment?

A. On page 31, I find the total equipment, expenditures for the year ending June 30, 1885, to be $68,186.07.

Q. Which is the same amount stated on Exhibit V?

A. Yes.

Q. Why are you justified in deducting from the construction account the amount of discount upon bonds sold during that year?

A. I have never done it, except at your request.

Q. Is it included in the books and statements of the Company in the construction account?

A. It ought to be.

Q. It has always been added, has it not?

A. I don't know what has been done in the books of the old Company.

Q. So far as you know, the amount of discount upon bonds and securities has been invariably added to the construction account, has it not?

A. No, sir. Right here, since within the past fifteen minutes, it has been demonstrated that they have not been invariable in their methods of treating this matter. For instance, in 1884, I think it was, the discount on bonds was kept entirely distinct and not shown in the construction account, whereas in 1885 it is shown.

Q. Well, is it shown in the year that we are now considering?

A. Yes.

Q. Is this discount in the year which we are now considering, the year ending June 30, 1885, is the amount of discount on the bonds and securities added and included in the construction account?

A. I find in the detail statement of construction from which I read figures into the record an item, "Common to all divisions, being discount on bonds and other general expenses, $870,828.91."

Q. Well, is there any doubt in your mind, Mr. Gray, that that amount was added to the construction account?

A. I have no doubt that that amount is included in this construction account.

Q. And have you any doubt that the amount which you gave for the year 1884 was, in like maner, added to the construction account?

A. It is not added in this report, but I have no doubt that on the books it was added.

Q. You mean that the details of it were not given in the report?

A. It is stated in a different way in the report.

Q. It is stated in a different way, but there is no doubt that it was added?

A. The fact that it was reported to the State is to me convincing evidence that it was so added.

Q. You claim that the discount should be added to the construction account?

A. Just as much as the cost of the rails and ties.

Q. But, for the purpose of ascertaining the actual amount of money expended by the Railroad Company as the purchase price of its property, and as the purchase price of the material

and the amount expended by it for labor, it should not be added, should it?

A. It would be, in my judgment, improper to make up a statement of the cost of a railroad company's property without including in that statement the discount suffered in the sale of its securities—

Q. Mr. Gray, that was not—

A. —if there cannot be proved to have been any fraud in connection with the transaction.

Q. Mr. Gray, that wasn't the question I asked you. I asked you whether, for the purpose of determining the exact amount which a purchaser (in this case the Railroad Company) paid for its material, for labor expended in procuring its equipment and the construction of its road, any discount upon securities sold by the Company for the purpose of securing the necessary funds, should be included.

A. Such a statement would not represent the value of a railroad company's property.

Q. You mean by that that such a statement would not represent the cost of that property to the railroad company?

A. I do.

Q. The question as to whether or not the railroad company paid more than the value of the property is another question, is it not?

A. If I may explain in my own way,—What I understand you to have in your mind is that the cost of the railroad is the labor expended in building the track and bridges and buildings and the cost of the material purchased, such as rails and ties and other material that has to be purchased outside in order to build the road. That is only a part of the cost of the property of a railroad company.

Q. What is the other cost?

A. There is the cost of right-of-way, expenses of organization, the cost of management during construction, discount on

securities sold, interest on securities issued during the time of construction, and other items of a kindred nature.

Q. Now, for the purpose of ascertaining the purchase price paid by the road for its right-of-way and all other portions of its railroad and all of its equipment, should not any expense attached to the sale of bonds and securities be excluded?

A. I do not think so; and perhaps I can illustrate my point in this way: A great deal of the cost of building a railroad is sometimes paid in securities. Contractors take, for their labor and material, bonds of the company at a certain rate per cent. I have in mind a case that is not exactly a case of construction although there was a part of the additional cost involved in it, but in 1874-5 a railroad company that I was connected with purchased steel rails at $83 a ton, paid for them in gold bonds bearing seven per cent interest at 90 cents on the dollar, and I remember one month, in settlement of the account, the premium on those bonds was sixteen per cent. My impression is that those bonds have all been paid off since, at par, and during their lifetime they paid, to whoever held them, seven per cent in gold. That, I think, illustrates the principle that in determining the value of a railroad company's property, you have got to consider the ability of the company to finance its enterprise.

Q. That has nothing to say to the question of fact as to how much money was actually paid, has it?

A. It has, in a case where bonds are paid to a contractor.

Q. The question as to whether or not you should be allowed additional amounts for interest, or for discount on securities, is a legal proposition; I am now speaking of the facts. There is no necessity why you and I should quarrel about this.

A. Oh, we won't quarrel, anyway, but I regard it not only as a legal proposition but as a business proposition.

Q. Now, if you will confine yourself to the questions of fact, Mr. Gray. What I ask you is whether or not this discount

represents a loss upon the sale of the securities because they were sold below par, or represents money actually paid out after that money had become the property of the Railroad Company, for or on account of construction or equipment.

A. I am afraid I have got away from the first part of the question, but, at any rate, I think I have answered it already. A company, in order to build a railroad, has got to have money to do it with; it has got, ordinarily, to borrow money to do it, and it becomes a question for financiers, perhaps for bankers, to advise as to whether bonds shall be sold at six per cent, say at par, or at five per cent, at 80 or some other price; but, in any event, the discount that is suffered in the sale of the bonds— And it may be a temporary condition of things; for instance, roads in this neighborhood that could sell their bonds easily in the neighborhood of par at three and a half per cent, a few years ago, probably could not sell them at five per cent now.

Q. I call your attention to the item on page 31 of the report for the year ending June 30, 1885, as follows: "Common to all divisions, being discounts on bonds and other general expenses, $870,828.91." Was that amount carried to and included in the construction account in the report of that year?

A. I suppose it was.

Q. Was that for cash paid out, or for a discount upon securities sold by the Company?

A. Part of it was for discount on securities sold by the Company.

Q. Was not all of the item I have read you for discount on securities?

A. No.

Q. How much of it was for discount on securities?

A. Well, assuming the item that Mr. Hillman called my attention to was correct, it was $845,140.91.

Q. And what was the balance?

A. On the face of it, the balance would represent these other

general expenses that are spoken of here.

Q. Deducting, then, from the construction account of that year the amount that was charged because of the discount on securities, what is the balance remaining for the construction account of that year?

A. I have already stated that in the record.

Q. That is, stated as stated in Exhibit V?

A. Yes.

Q. I now call your attention to the report of the Northern Pacific Railroad Company to the State of Minnesota for the year ending June 30, 1886, verified by T. F. Oakes and M. P. Martin, August 31, 1886, and ask you to read into the record the items on page 5 under the heading Cost and Value of Road and Equipment.

A. "Cost of right-of-way entire line, cannot answer; cost of right-of-way in Minnesota, cannot answer; cost of construction entire line and equipment since reorganization October, 1875, $82,305,213.81; cost of construction in Minnesota, cannot answer; cost of present equipment applying to 2,057.9 miles of road owned and 2,800.6 operated, $11,620,301.11; cost of all real estate used exclusively in operating the road, cannot answer; cost of all fixtures and conveniences for business of the road, cannot answer; total cost of construction and equipment entire line, as above, $82,305,213.81; average cost of road and equipment per mile, cannot answer; total cost of road and equipment in Minnesota, cannot answer; average cost of road and equipment per mile in Minnesota, cannot answer. If the road was not built by the present owners, state cost of road and equipment and all other property to them; no answer given. The value of all property owned by the corporation, railroad, equipmeut and lands, are represented on the Company's books by $156,600,373.19." I find a foot-note here reading "Road only partly built by this Company."

Q. Will you ascertain whether or not that report contains

a statement of the construction account for the year?

A. I find, on page 7, a statement of cost of road and equipment, giving as the total cost of road for the year, $1,235,892.35; and total cost of equipment, $23,954.95; grand total, cost of road and equipment, $1,259,847.30.

Q. In this account of the construction for the year I find the item, "Interest and discount charged to construction $1,145.74"; will you please deduct that from the total given, and let me know what the balance is?

A. $1,234,746.61.

Q. Which is the amount stated in Exhibit V?

A. Yes.

Q. And the equipment that you have already given is the amount stated in Exhibit V?

A. That is right.

Q. With the exception of the item which I have requested you to deduct from the report to the state, to-wit, interest and discount charged to construction, $1,145.74, this report to the State agrees with the report to the stockholders of the same year?

A. Yes.

Q. I now call your attention to the report of the Northern Pacific to the State of Minnesota for the year ending June 30, 1887, verified by R. L. Belknap, Treasurer, and J. A. Barker, General Auditor on the 6th of September, 1887, and ask you to turn to page 9 of that report and read the items appearing under Cost and Value of Road and Equipment.

A. "Cost of right-of-way entire line, cannot answer; cost of right-of-way in Minnesota, cannot answer; cost of construction entire line since reorganization, $74,387,010.44; cost of construction in Minnesota, cannot answer; cost of present equipment applying to 2,140.1 miles of road owned and 3,081.5 operated, $12,042,686.81; cost of all real estate used exclusively in operating the road, cannot answer; cost of all fixtures and con-

veniences for business of the road, cannot answer; total cost of construction and equipment entire line as above, $86,429,697.25; average cost of road and equipment per mile, cannot answer; total cost of road and equipment in Minnesota, cannot answer; average cost of road and equipment per mile in Minnesota, cannot answer. Is your construction account closed? No. If the road was not built by the present owners, state cost of road and equipment and all other property to them. $160,102,305.73. The value of all other property owned by the corporation, railroad equipment and lands, are represented on the Company's books by $160,102,305.73." And there is a foot-note stating "Road only partly built by this Company."

Q. Will you examine that report and ascertain if there is an account of construction for the preceding year? I mean for the year ending June 30, 1907.

A. On page 12, there is a statement showing construction during year ending June 30, 1887, giving, for cost of road, $3,702,097.74.

Q. Is that the amount stated in Exhibit V?

A. Yes, it is.

Q. And equipment?

A. Equipment, $422,385.70; also stated in Exhibit V.

Q. Now will you please ascertain if that corresponds with the report to the stockholders for the same year?

A. It does.

Q. I call your attention to the report of the Northern Pacific Railroad Company to the State of Minnesota for the year ending June 30, 1888, verified by T. F. Oakes and J. A. Barker, on the 29th of September, 1888, and ask you to read into the record the items appearing on page 9, under the head of Cost and Value of Road and Equipment.

A. "Cost of right-of-way entire line, cannot answer; cost of right-of-way in Minnesota, cannot answer; cost of construction entire line since reorganization, $78,484,890.88; cost of con-

struction in Minnesota, cannot answer; cost of present equipment applying to 2,140.1 miles of road owned, and 3,316.5 miles of road operated, $12,301,987.22; cost of all real estate used exclusively in operating the road, cannot answer; cost of all fixtures and conveniences for business of the road, cannot answer; total cost of construction and equipment entire line since reorganization, $90,786,878.10; average cost of road and equipment per mile, cannot answer; total cost of road and equipment in Minnesota, cannot answer; average cost of road and equipment per mile in Minnesota, cannot answer. Is your construction account closed? No. If the road was not built by the present owners, state cost of road and equipment to them, including property acquired under decree of court. $162,873,519.33. The value of all property owned by the corporation, railroad equipment and lands, are represented on the Company's books by $165,229,281.31." There is a foot-note reading "Road only partly built by this Company."

Q. Now will you give us the construction account as it appears in that report for that year?

A. On page 12, under the head of Cost of Road and Equipment, I find Additions or Betterments during year ending June 30, 1888; the total cost of road stated is $3,389,339.68; without eliminating the credit of $708,540.76, it shows an expenditure of $4,097,880.44.

Q. Deducting from that the discount on bonds and securities shown in the stockholders' report of the same year—?

A. The discount on bonds and bonus for extending dividend certificates, amounting to $2,188,304.76, leaves a balance of $1,909,575.68, as per Exhibit V.

Q. And how about equipment?

A. The report to the State shows total cost of equipment (which more properly would be a net cost of equipment, as there are several credits) of $89,907.31, which corresponds with Exhibit V.

Q. And do those statements and items, as contained in the report to the State, correspond with the report to the stockholders of the same year?

A. They do.

Q. I think I have asked you already, but I will ask you again, in this report to the State, in which the construction account appears, showing the construction for the year as you have given it, one of the items going to make up that construction account is interest and discount charged to construction, $2,301,639.87?

A. Yes.

Q. By reference to the report to the stockholders of that year, you find that the amount of that item, made up of discount on bonds and bonus for extending dividend certificates, was $2,188,304.76?

A. Yes.

Q. And that latter amount you have, at my request, deducted from the construction account?

A. Yes.

Q. Then in this construction account, as contained in the report to the State, there was a credit given for property acquired under decree of court September 29, 1875, of $708,540.76; that amount, at our request, you have eliminated in the account?

A. Yes.

Q. And after those additions and subtractions you find the amount as stated in Exhibit V?

A. Yes.

Q. I call your attention to the report of the Northern Pacific Railroad Company to the State of Minnesota for the year ending June 30, 1889, verified by T. F. Oakes and J. A. Barker, on the 23rd of September, 1889. There seems to have been a change in the form of reports that year?

A. Yes, we are getting to a more familiar form of report.

Q. Now turn to page 14 of that report and please state the construction account for the year ending June 30th.

A. Under the head of Building New Road, during the year ending June 30, 1889, $479,235.47; improving old road, $705,713.73; making a total of $1,184,949.20.

Q. In that statement appears an item "Discount on securities, $250,985." Please deduct that amount and state what the balance is.

A. It leaves a balance of $933,964.20, which corresponds with Exhibit V.

Q. What was the equipment purchased during that year?

A. The equipment was $424,081.72; but there were credits under head of property and material sold, which brings it down to $319,598.32.

Q. The item of equipment purchased for that year, as appearing in Exhibit V, should read—

A. $319,598.32.

Q. With that correction, Exhibit V agrees with the report from which you have read?

A. Yes.

Q. I now call your attention to the report of the Northern Pacific Railroad Company to the State of Minnesota for the year ending June 30, 1890, verified by T. F. Oakes and J. A. Barker, October 13, 1890. Please give the construction account for the year ending June 30, 1890, as it appears in the report.

A. Total construction for the year is given as $14,117,760.16.

Q. The account includes an item for discount on securities, does it?

A. Yes; amounting to $2,390,303.18; leaving $11,727,456.98, to which has been added in Exhibit V the credits at the top of the page, $557,984.92; making a total of $12,285,441.90, from which deduct $1,610 for extending dividend scrip; and the balance is left, as shown in Exhibit V, of $12,283,831.90.

Q. The last amount to which you refer as having been deducted is taken from the report to the stockholders?

A. Yes.

Q. Of the same year?

A. Of the same year.

Q. Now the equipment for the year ending June 30, 1890.

A. The equipment is as stated in Exhibit V, $1,883,904.07.

Q. I call your attention to the report of the Northern Pacific Railroad Company to the State of Minnesota for the year ending June 30, 1891, verified by T. F. Oakes and J. A. Barker, October 28, 1891, and call your attention to the construction account, on page 29, and ask you to make a similar statement from that report as for the last year.

A. The statement shows a total construction of $8,448,547.92; to which has been added, in Exhibit V, the amount charged to income account, as permanent improvements, of $127,239.95, and the item of credit at the head of the page, amounting to $761,450.47, making a total debit of $9,337,238.34; from which has been deducted discount on securities sold for construction, $2,383,331.98, leaving a net amount of $6,953,906.36, corresponding with Exhibit V Corrected.

Q. And the equipment?

A. The equipment is as stated in Exhibit V, $2,212,697.63.

Q. Now this amount of $127,239.95, which appears as the amount charged to income account as permanent improvements, what is that?

A. It is improvement of bridges and culverts and trestles, and probably improvements of the grade, which add to the value of the property, but which have been charged to income account.

Q. Well, is that item there an amount expended for work actually done or is it a sum simply set aside to a certain account?

A. It represents actual expenditures for material and labor.

Q. Made before that time?

A. Made during the year.

Adjourned until 10 o'clock, A. M., July 25th.

On Saturday A. M., July 25, 1908, the hearing of the above entitled cause was continued before Hon. Chas. E. Otis, Special Master. Hearing resumed.

H. A. GRAY,

recalled for further cross-examination, testified:

By Mr. O'BRIEN:

Q. I hand you the report of the Northern Pacific Railroad Company to the State of Minnesota for the year ending June 30, 1892, verified by T. F. Oakes and J. A. Barker, November 5, 1892, and ask you to give the amount of construction reported for that year.

A. The amount reported for the year is $8,565,540.73.

Q. There is included in that a credit under the item "Discount on securities sold for construction," of how much?

A. $3,691,673.11.

Q. Apparently the securities were sold at a premium at that time?

A. I don't know.

Q. But, anyway, that credit is given there?

A. Yes.

Q. There is also a credit under the first item "Franchise, railroad, equipment and lands acquired under decree of court?

A. $1,544,765.97.

Q. There is also "Construction, paid out of operating expenses?"

A. $137,582.10. That makes a total of $13,939,561.91.

Q. You correct the item in Ex. V by deducting $2 from it?

A. Yes.

Q. Leaving it, as corrected, $13,939,561.91?

A. Yes.

Q. From the total amount reported to have been expended for construction in the report for the year ending June 30,

1892, a credit was given to the account, from the property purchased under the foreclosure of 1875, of $1,544,765.97?

A. Yes.

Q. A credit was also given under the item "Discount on securities sold for construction" of $3,691,673.11?

A. Yes.

Q. Those two credits, in the computation you have now made, have been eliminated?

A. Yes.

Q. And there has been added to the sum so found the amount of $137,582.10, which appears to have been paid for construction out of operating expenses?

A. Yes.

Q. Making a total sum paid for construction, during that year, of the amount now appearing in Ex. V, as corrected?

A. Yes.

Q. In that total, so arrived at, is there included any amount for the acquisition of branch lines, during that year?

A. There is.

Q. How much is that amount?

A. $13,227,032.34.

Q. What was the amount expended for equipment during the year we are now considering?

Mr. How: You mean as shown by the statement.

A. The amount, as shown by the statement, is $2,520,889.10.

Q. Does that contain a charge for discount upon bonds?

A. Yes.

Q. Will you read the item.

A. Discount on bonds, $939,858.42.

Q. Now, will you deduct the amount of that item from the total equipment.

A. Deducting that item leaves a net amount of $1,581,030.68, as shown in Ex. V.

Q. I hand you report of the Northern Pacific Railroad Company to the Railroad and Warehouse Commission of the State of Minnesota for the year ending June 30, 1893, verified by J. A. Barker, General Auditor, November 18, 1893, and ask you to state the amount reported as having been expended for construction during the period covered by that report.

A. I find the total charge for construction on this statement to be $5,942,897.76, to which adding the construction included in operating expenses, $548,098.97, gives a total of $6,490,996.73, from which deducting the amount charged on account of the cost of the reorganized company, in 1875, of $140,786.57, and the discount on securities of $7,015.50, leaves a net amount of $6,343,194.66.

Q. That is a difference of $6.53 from the amount stated in Ex. V?

A. Yes.

Q. Will you now correct Ex. V to conform to your statement? The amount then corresponds with Ex. V, as corrected?

A. Yes.

Q. What amount was expended for equipment during the year we are considering?

A. $25,331.44, as shown on Ex. V.

Q At what date were the receivers appointed in 1893?

A. August 15th, I believe.

Q. August 15, 1893?

A. Yes.

Q. I now hand you report of the Northern Pacific Railroad Company for the year ending June 30, 1894, verified by J. A. Barker, general auditor for the Receivers, November 26, 1894 and ask you to state the amount expended for construction during the period covered by that report, as shown by that report?

A. The total charged to construction, as shown by the re-

port, $1,783,589.16; to which, adding the construction included in operating expenses, $242,702.47, makes a total of $2,026,291.63; deducting from this amount an item charged to original construction of $24,311.93, and discount on securities sold for construction, $1,820,570.12, leaves a net amount of $181,409.58, as shown by Exhibit V.

Q. Will you please state the amount expended for equipment during that year, as shown by the report?

A. $25,960.44, as shown by Ex. V.

Q. I now hand you report of the Northern Pacific Railroad Company, or rather the receivers of that company, to the State of Minnesota, for the year ending June 30, 1895, verified by John Scott, comptroller to the Receivers, on October 14, 1895, and ask you to state the amount expended for construction during the period covered by that report as shown by it.

A. The report for that year shows a credit of $467,485.13. Included in the items that make up that credit are an item on account of the original construction of $377,728.90, and a credit to discount on securities sold for construction, of $16,725, which, deducted from the total credit, leaves a net credit of $73,031.23. There was a total of construction charged to operating expenses of $251,745.77; deducting the net credit of $73,031.23 from this item, leaves a net debit balance of $178,714.54, as shown by Ex. V.

Q. Will you state the amount expended for equipment during the period covered by that report, as given in the report?

A. $26,941.50, as shown by Ex. V.

Q. I hand you the report of the Receivers of the Northern Pacific Railroad Company to the State of Minnesota for the year ending June 30, 1896, verified by Edwin H. McHenry, receiver, and M. P. Martin, auditor, November 23, 1896, and ask you to state the amount expended for construction during the period covered by that report as shown by the report.

A. Under the head of Charged to Construction, I find a

credit of $84,866.52; in making up this credit, however, there is a credit to the original property of $186,728.82, and a credit to discount on securities sold for construction of $356.90. Deducting the net credit from the last two amounts stated, leaves a debit of $102,219.20. The amount included in operating expenses for the year was $789,261.26; which added to the net debit stated above, makes a total of $891,480.46, as stated in Ex. V.

Q. Will you state the amount expended during the period covered by that report for equipment, as shown by the report?

A. $1,800.

Q. That is the amount stated in Ex. V?

A. As stated in Ex. V.

Q. In the form in which this report is kept, is the total cost of the construction and equipment stated?

A. The blank calls for the total cost to June 30, 1895, and 1896, respectively.

Q. Now, is there given there the total cost of branch lines to June 30, 1896?

A. I think there is.

Q. Will you read the item?

A. The printed blank calls for "Road built by contract," after which has been added with a pen, in paranthesis, "branch lines, amounting for the year ending June 30, 1896, to $35,048,748.79."

Q. You said "amounting for the year ending June 30th."

A. Amounting June 30th, 1896, to $35,048,748.79.

Q. That is the total cost of branch lines to June 30, 1896?

A. Yes.

Q. Please state the amount given there as the total cost of construction and equipment of the entire road.

A. Grand total, cost construction, equipment, etc., June 30, 1896, $212,151,714.08.

Q. I now hand you the report of the Receivers of the North-

ern Pacific Railroad Company for the two months ending August 31, 1896. They made a report for the last two months of that year. The other report, the Master will remember, is to June 30th. Verified by E. H. McHenry, Receiver, and M. P. Martin, Auditor, on November 2, 1897, and ask you to state what that report shows as the amount expended for construction during the period covered by it.

A. It shows a credit for the period of $1,967,148.21.

Q. That item does not appear upon Ex. V, does it?

A. No.

Q. Is there any amount given for equipment during that period?

A. There is a credit of $5,822.84.

Q. And that item does not appear on Ex. V.

A. No.

Q. What is given in that report as the total cost of construction and equipment to the date of that report?

A. $210,178,743.03.

Q. That was on the 31st day of August, 1896?

A. Yes.

Q. At the time of the appointment of the Receivers in 1875, one mortgage, and the bonds secured by it, had been issued by the Northern Pacific Railroad Company?

A. Yes.

Q. Those bonds were redeemed by the preferred stock of that Company?

A. Yes.

Q. So that, following the receivership proceedings, the reorganization of 1875, the Company had no bonded indebtedness?

A. That is right.

Q. The first mortgage that was issued after that was the mortgage of 1879?

A. The first mortgage was the Missouri division mortgage,

May 1, 1879.

Q. And how much was realized in cash from that mortgage?

A. That is already in the record. The amount realized in cash, $2,499,738.

Q. What was the next mortgage?

A. The next mortgage was the Pend d'Oreille division mortgage.

Q. The date of it?

A. 1879.

Q. And what amount in cash was realized from that mortgage?

A. $4,325,599.75.

Q. What was the next mortgage?

A. The next was the general first mortgage, in 1881.

Q. And how much was realized in cash from that mortgage?

A. $44,135,290.80.

Q. What was the next mortgage?

A. The general second mortgage of 1883.

Q. And how much was realized upon that, in cash?

A. $16,485,989.76.

Q. Was there a third mortgage?

A. There was, in 1887.

Q. And how much was realized in cash from that?

A. $9,197,921.

Q. Was that the last mortgage?

A. No.

Q. There was the consolidated mortgage?

A. The consolidated mortgage, in 1889.

Q. Yes, in 1889. Was there any cash realized from that mortgage?

A. Yes.

Q. How much?

A. The statement that I have, gives an amount which must include more than cash. The amount shown in this statement is $42,136,751.62.

Q. Can you give us the amount of cash that was realized upon that mortgage?

A. It would probably be a good deal of work. Of course, it is all tantamount to cash. A memorandum in my hand shows that cash sales were made from January 31, 1890, to July 31, 1893, which realized $19,019,175.97.

Q. Will you, at your leisure, verify that memorandum, Mr. Gray?

Mr. HOW: Well, this is a carefully prepared memorandum for the purpose of this case, I take it.

WITNESS: I think Mr. Hillman had better do that.

Mr. How: Mr. Hillman can verify it if he wants to.

Q. Well, do you state that that is the amount?

A. Yes, I believe that to be a correct statement.

Q. I didn't desire that you should shoulder the responsibility of the correctness of your memorandum on Mr. Hillman. If you swear that that is the correct amount, as shown by the records, that is all I care about, but if you are simply reading from the memorandum without assuming to state whether it is correct or not, I would like you to verify it.

A. Well, the memorandum is drawn from the records, and I am satisfied to put it in.

Q. As your statement of fact?

A. Yes.

Q. What were the total proceeds of the land sales, from the time of the re-organization of 1875 to the 31st of August, 1896?

A. The total sales and interest, of lands, from September 29, 1875, to August 31, 1896, was $36,829,456.34; of this amount there was received in cash $34,338,852.01. The differ-

ence between those two amounts consists of deferred payments.

Q. Now of that amount how much was net?

A. The net cash receipts for the period were $24,902,622.83.

Q. What do you mean by net cash receipts?

A. It is the amount of cash received less the expenses of the department and the taxes paid.

Q. How much of that net amount was used in the construction and equipment of the road?

A. None.

Q. Well, what was the use made of that cash?

A. $4,532,000 was used in the cancellation of bonds; $15,745,903.26 was used in the cancellation of preferred stock; $4,616,607.03 was paid into the sinking fund of the general first mortgage bonds; and the balance of $8,112.54 was paid to the trustee to be applied to cancelling bonds.

Q. Had the Northern Pacific Railroad Company any other sources of income than those I have mentioned between the re-organization of 1875 and the 31st of August, 1896, except its earnings, from its business of transportation?

A. The sale of bonds, the proceeds of the land-grant and the earnings of the Company. There was, as I read into the record in June, more or less stock used (treasury stock) in payments for property or services received by the Company.

Q. What was the gross amount of that?

A. I would have to look that up again.

Q. Well, it was less than five millions, was it not?

A. In the statement from which I read at that time I find an item "Issued for other purposes" of $9,254,310.10.

Q. Now, without at this time questioning whether or not that preferred stock was sold or delivered for its par value, but assuming that the Company received either cash, services or supplies, to the amount of the par value of that stock, will

you please state the total amount of the sums realized from sale of bonds and stock during the period from the re-organization in 1875 to the 31st of August, 1896, including in that statement the stock at the full par value, as you have given it, and also the consolidated mortgage at the full amount of the bonds issued, as you have given it, assuming that it was all for cash?

A. To the amount above spoken of should be added collateral trust notes, from which $9,007,950 were realized in cash. A debt was created during the period on account of dividends claimed to be due to stockholders, for which certificates were given, and there was an amount of dividend certificates extended which represented $4,640,821.20 in cash.

Q. Include the last amount you have mentioned, and then give me the total available assets received during that time as testified to by you; and from this exclude the receipts from sales of land, because you have already stated that none of that amount was expended for construction.

A. The total amount, excluding the net land receipts, was $141,684,372.23.

Q. Now add to that amount of $141,684,372.23 the cost of construction and equipment, as given in the report to the state for the year ending June 30, 1876, $20,017,094.48, and what do you find as a total?

A. The total amount, arrived at in that way, is $161,701,466.71.

Q. In Ex. V the total given at that time, which is subject to the slight corrections which have been made, is $151,161,878.31, is it?

A. Yes.

Q. And the total amount stated in the Receivers' report of August 31, 1896, was, as you have stated, $210,178,743.03?

A. That is right.

Q. I now hand you the report of the Northern Pacific Rail-

way Company for the ten months ending June 30, 1897, verified by C. S. Mellen, President, and H. A. Gray, Comptroller, November 1, 1897, this being the report to the State of Minnesota, and ask you to state the cost of construction and equipment given in that report.

A. The total charged to construction was $819,124.32; and, stated as in accordance with the blank, as included in operating expenses, is $69,261.38, making a total, as per Ex. V, of $888,385.70.

Q. And how much for equipment expended during the ten months?

A. $232,029.01.

Q. Then Ex. V, you think, should be corrected so as to make that item read—

A. $232,029.01.

Q. Will you make that correction in Ex. V?

Witness does so.

Q. Now, in that statement, what is given as the prior cost of road, equipment and permanent improvements?

A. The property purchased at foreclosure is given as $293,947,706.35.

Q. And will you read the foot-note?

A. There is a note which says, "Inasmuch as property purchased at foreclosure embraced nearly 31,000,000 acres of land, it would be manifestly misleading to figure cost per mile on the amount shown."

Q. Will you read the last grand total appearing on that page, and read the language?

A. "Grand total cost, construction, lands, equipment, etc., $307,691,039.68."

Q. Mr. Gray, that is on the page of the report headed Cost of Road, Equipment and Permanent Improvements, is it not?

A. Yes.

Q. And in reaching the total by commencing with the item

"Construction, property purchased at foreclosure, $293,947,706.35," adding to it the amounts you have given as expended for construction and equipment during the ten months, you then reach the total under the item, "Grand total cost construction, lands, equipment, etc., $307,691,039.68"?

A. Yes.

Q. Why did you include the word "lands" in ink with a pen on that sheet when it is a page headed "Cost of Road, Equipment and Permanent Improvements"?

A. Because it was the nearest we could come to complying with the requirements of the blank.

Q. Then that is not a correct statement of the cost of the road, equipment, and permanent improvements, so far as the construction and equipment account is concerned?

A. It is a correct statement of the cost to the present Company as of that date of its property.

Q. Under the re-organization proceedings?

A. Yes.

Q. And assuming that the first item correctly states the cost of all of the property received by the Railway Company, the balance of the account is correct?

A. Yes.

Q. Now, that first item not only includes cost of construction and equipment, but includes all the property of every kind which the Railway Company received as a result of the re-organization plan?

A. That statement is subject to this qualification: That in making the balance-sheet in this same report the gross amount of the Company's property is segregated, showing separately cost of equipment, stock owned, bonds owned, advances to the land department, land department current assets, cash in current assets, material and supplies, and cash in the hands of trustees of sinking funds.

Q. Amounting in all to—?

A. The aggregate of $320,890,569.80.

Q. I call your attention to the general balance-sheet in the report of the Railway Company to the stockholders for the year ending June 30, 1897, and ask you to read the items appearing on that sheet under the heading "Capital Assets."

A. Northern Pacific Estate: property purchased at foreclosure, $293,947,706.35; betterment and enlargement since September 1, 1896, $819,124.32; a total of $294,766,830.67; equipment purchased at foreclosure and valued at $12,692,180. New equipment purchased since September 1, 1896, out of betterment and enlargement fund, $232,029.01; a total of $12,924,209.01; trustees of sinking funds, cash in hands of trustees applicable to the retirement of mortgage debt, $195,103.15; a total of capital assets of $307,886,142.83.

Q. And that you have accepted as the cost of the property to the present Company September 1, 1896?

A. That with the cash assets and treasury securities.

Q. In the report filed by the Receivers for the two months ending August 31, 1896, that report having been verified on November 2, 1897, at page 29, the page headed "Cost of Road, Equipment and Permanent Improvements," the grand total cost of construction, equipment, etc., is given as $210,178,743.03; in the report filed by the Northern Pacific Railway Company for the ten months ending June 30, 1897, verified by Mr. Mellen and yourself on November 1, 1897, the construction account appearing on page 29, that page being headed "Cost of Road, Equipment and permanent Improvements," commencing as of September 1, 1896, begins with the item "Construction, property purchased at foreclosure $293,947,706.35," then under, "Equipment purchased at foreclosure, $12,692,180," making a total charge as of September 1, 1896, of $306,639,886.35; I ask you whether or not in commencing your reports on behalf of the Railway Company with those items you did not intend and assume to give what was the book cost

of all of the property received under the foreclosure proceedings and under the plan of re-organization following the receivership of 1893.

A. Yes.

Q. I now hand you the report of the Northern Pacific Railway Company to the State of Minnesota for the year ending June 30, 1898, and ask you to turn to the construction account and state the amount expended for construction during the period covered by that report as stated in the report.

A. The total amount charged to construction or equipment on this page shown as "Total construction" was $1,859,628.73.

Q. From the total amount expended, certain amounts have been deducted, have they not, which appear as credits?

A. Yes.

Q. There have been credited net proceeds of land department?

A. Yes.

Q. Please add that to the total expenditure.

A. The total, as shown by Ex. V, of those two items, is $5,484,341.68.

Q. Now, there was expended for equipment during that period—?

A. $278,011.33. Adding to that the equipment charged to income, $326,802, makes a total of $604,813.33, as shown by Ex. V.

Q. I hand you the report of the Northern Pacific Railway Company for the year ending June 30, 1899, verified by C. S. Mellen and H. A. Gray, October 7, 1899, and ask you to state the amount expended for construction during the period covered by that report as shown by the report.

A. $530,111.08. Charging back the net proceeds of the land department, $1,142,903.22, brings the total up to $1,673,014.30, as shown by Ex. V.

Q. By "charging back" you mean that in the construction

account, as given in this report, there was deducted from the total amount expended for construction the net proceeds of land sales?

A. Yes.

Q. And by "charging back" you mean that you have simply eliminated that credit and are now giving the total amount expended for construction without any credit because of the amount received from land?

A. Yes.

Q. State the amount expended for equipment during the same period.

A. The total charge to equipment for the year was $1,728,175.97; charged to income account for equipment during the year, $71,112.18; making a total of $1,799,288.15, as per Ex. V.

Q. Now, going back for a moment, I desire to call your attention to the report for the year ending June 30, 1898, and ask you whether the construction account for that year includes a charge for the purchase of other roads, branch lines, or securities of other roads.

A. It does.

Q. Will you give the item?

A. There is an item of "Purchase of S. L. S. & E. R. R. securities, $4,433,713.21."

Q. Is there any such item in the report for the year ending June 30, 1899?

A. Yes.

Q. What is the item?

A. Cost of Montana Union and Montana railways, $598,129.75.

Q. So that, from this time on, we may assume that where a road, or the securities of a road or a branch line was purchased, it would appear in the construction account?

A. Yes. It is shown in that way because it was under-

stood to be what the Interstate Commerce Commission and the State Commission desired in the form of their reports.

Q. I hand you the report of the Northern Pacific Railway Company for the year ending June 30, 1900, verified by J. W. Kendrick, second vice-president, and M. P. Martin, auditor, October 22, 1900. Will you please state the amount expended for construction during the period covered by that report, as shown by the report?

A. The construction account for that year shows a credit of $6,156,892; of which there was $13,048,827.49 net proceeds of the land department, and an item of profit and premium on sale and exchange of securities of $4,337,252.22; these last two amounts making $17,386,079.71; from which, deducting the net credit as shown at the foot of the page, viz., $6,156,892, leaves a debit balance of $11,229,187.71, as shown in Ex. V.

Q. That amount is the amount, according to that report, which was actually expended for construction during the period covered by the report, is it not?

A. For construction and for cost of other lines.

Q. So that this method that you have adopted does show the actual amount expended for construction and the procuring of other lines during the period covered by that report?

A. Yes.

Q. And that is as stated in Ex. V, $11,229,187.71?

A. From year to year there are amounts credited for property taken from abandoned line; the aggregate amount is not very large, but it is a question whether the credit for such property should not be treated in the same way as the credit from the sale of lands.

Q. Anyway, that would make an additional credit which should be added to this amount of this year of $43,803.05?

A. Yes. There are several years in which a similar item appears.

Q. Now, on that question of material, that you say you have

some doubt as to whether it is a proper credit to construction account, you mean, where old material is replaced by new material and the old material sold, that construction account has been credited for the actual amount received, do you not?

A. That is not the point; but in places where we have been straightening out the lines, or where lines have been built to mines and the mines have given out, we have taken up the rails and ties and other material and sold it for what we could get and we have credited to the cost of the property as a whole. Now, the question with me is whether that credit should be applied in this statement against the charges for the respective years, whether it should not be treated in the same way that Mr. Hillman treated the credits in the old Company's affairs where there were credits that applied to the cost of the property at the time it was foreclosed.

Mr. How: I am inclined to think I shall not make any claim on it.

Q. Will you please state the amount expended for equipment during the period covered by this report?

A. $2,232,743.02.

Q. Which is the amount shown on Ex. V?

A. Which is the amount shown on Ex. V.

Adjourned until Monday morning, July 27th.

On Monday, July 27, 1908, owing to the illness of Mr. O'Brien the case was continued until the morning of Tuesday, July 28th, at 10 o'clock, at which time the hearing was resumed.

H. A. GRAY,

recalled for further cross-examination, testified:

By Mr. O'BRIEN:

Q. I hand you the report of the Northern Pacific Railway

Company to the State of Minnesota for the year ending June 30, 1901, verified October 9, 1901, by C. S. Mellen, President, and H. A. Gray, Comptroller, and ask you to state the amount of construction done upon the road during the period covered by that report, as shown by the report.

A. The report shows a credit of $475,904.59. There is included in the report net proceeds of the land department, $3,141,854.43; and received from the investments in excess of cost, $157,721.72, and a transfer to equipment of $154,490, making a net debit balance of $2,978,161.56.

Q. As shown on Exhibit V now corrected by you?

A. Yes.

Q. Now, what is the amount expended during that period for equipment?

A. $2,948,737.75, as shown in Exhibit V.

Q. I now hand you report of the Northern Pacific Railway Company to the State of Minnesota for the year ending June 30, 1902, verified by C. S. Mellen, President, and H. A. Gray, Comptroller, November 1, 1902, and ask you to state the amount expended for construction during the period covered by that report, as shown by the report.

A. The report shows a credit of $3,313,133.53. In arriving at this credit there is a credit for net proceeds of land department of $3,807,121.88, and received from sundry investments in excess of cost, $2,200,392.38, leaving a net debit of $2,694,380.73, which agrees with Exhibit V.

Q. State the amount expended for equipment during the same period as shown by that report.

A. The amount charged to equipment was $4,616,895.10, to which, adding equipment reported as included in operating expenses, $196,587.62, makes a total of $4,813,482.72, as per Exhibit V.

Q. I now hand you the report of the Northern Pacific Railway Company to the State of Minnesota for the year ending

June 30, 1903, verified by C. S. Mellen and H. A. Gray, October 9, 1903, and ask you to state the amount expended for construction during the period covered by that report as shown by the report.

A. The statement shows a net credit of $1,356,290.89; there is a credit of $6,547,219.91 for net proceeds of land department, leaving a debit of $5,190,929.02; deducting from this amount a balance of discount on sale and exchange of securities of $1,041,308.20 leaves a net amount of $4,149,620.82, as per Exhibit V.

Q. This discount from the sale of securities is the amount stated in that report?

A. Yes.

Q. Appearing in that report, and therein charged to construction?

A. Yes.

Q. And in arriving at the amount in Exhibit V, that amount has been deducted from the amounts charged to construction?

A. Yes.

Q. What amount was spent for equipment during the same period, as shown by that report?

A. Charged to equipment, $3,924,299.51; reported as included in operating expenses, $32,424.72; making a total of $3,956,724.23, as per Exhibit V.

Q. I hand you annual report of the Northern Pacific Railway Company to the State of Minnesota for the year ending June 30, 1904, verified by Howard Elliott, President, and H. A. Gray, Comptroller, October 8, 1904, and ask you to state the amount expended for construction during that period as shown by that report.

A. Total charged to construction, $4,504,255.34; to which, adding the net proceeds of land department, $1,043,196.61, makes a total of $5,547,451.95, as shown by Exhibit V.

Q. You speak there of adding to the first amount stated by

you the full proceeds of the land department; that was done by you because they had been deducted from the first amount stated?

A. We deduct in our accounts every year from our capital account the net proceeds of the land department and the property sold away.

Q. When you stated that you added them, it was equivalent to eliminating them as a credit?

A. Yes, sir.

Q. Will you please state the amount expended for equipment during the period covered by that report, shown by that report?

A. $125,509.92.

Q. I hand you the report of the Northern Pacific Railway Company to the State of Minnesota for the year ending June 30, 1905, verified by H. A. Gray, Comptroller, October 27, 1905, and ask you to state the amount expended for construction by that Railway Company during the period covered by that report as shown by the report.

A. The total amount shown by the report was $790,065.35; to which, adding the net proceeds of land department, $832,415.22, gives a total, as shown in Ex. V, of $1,622,480.57.

Q. And the amount expended for equipment during the same period as shown by the report, was—?

A. The amount expended was $2,749,369.32, as per Ex. V.

Q. I now hand you the report of the Northern Pacific Railway Company to the State of Minnesota for the year ending June 30, 1906, verified by Howard Elliott, President, and H. A. Gray, Comptroller, October 12, 1906. State the amount expended by the Company for construction during the period covered by that report as shown by the report.

A. The total charged to construction, as shown by the report, was $283,012.90; the net proceeds of land department, $1,088,544.94; balance of discount on sale and exchange of se-

curities, $314,171.07; making a total, as per Ex. V, of $1,685,728.91.

Q. That is the amount shown on Ex. V?

A. On Ex. V.

Q. Now please state the amount expended for equipment during the same period, as shown by that report.

A. The amount shown as total equipment on the statement, which corresponds with Ex. V, is $516,309.76; but I want to raise a question here, as in the case of the lands sold: We made an arbitrary credit to our general equipment account and capital of $2,000,000 for depreciation. That depreciation extended over a number of years; and it is a question that may come up for consideration as to whether it ought not to be added in this amount for this year. That is, the total expenditure for equipment was $2,516,309.76.

Q. During the period covered by that report, according to the report, there had been actually expended by the Company, for equipment, $2,516,309.76?

A. Yes.

Q. In preparing the report, you charged off for depreciation, two million dollars?

A. Yes.

Q. Please restore that two million dollars and then state the amount which was spent during the period covered by that report for equipment.

A. $2,516,309.76.

Q. Now, will you please change Ex. V to correspond with that last statement of yours?

Witness does as requested.

Q. I now hand you the report of the Northern Pacific Railway Company to the State of Minnesota for the year ending June 30, 1907, verified by Howard Elliott and H. A. Gray, October 3, 1907, and ask you to state the amount expended for construction during the period covered by that report, as stated

you the full proceeds of the land department; that was done by you because they had been deducted from the first amount stated?

A. We deduct in our accounts every year from our capital account the net proceeds of the land department and the property sold away.

Q. When you stated that you added them, it was equivalent to eliminating them as a credit?

A. Yes, sir.

Q. Will you please state the amount expended for equipment during the period covered by that report, shown by that report?

A. $125,509.92.

Q. I hand you the report of the Northern Pacific Railway Company to the State of Minnesota for the year ending June 30, 1905, verified by H. A. Gray, Comptroller, October 27, 1905, and ask you to state the amount expended for construction by that Railway Company during the period covered by that report as shown by the report.

A. The total amount shown by the report was $790,065.35; to which, adding the net proceeds of land department, $832,415.22, gives a total, as shown in Ex. V, of $1,622,480.57.

Q. And the amount expended for equipment during the same period as shown by the report, was—?

A. The amount expended was $2,749,369.32, as per Ex. V.

Q. I now hand you the report of the Northern Pacific Railway Company to the State of Minnesota for the year ending June 30, 1906, verified by Howard Elliott, President, and H. A. Gray, Comptroller, October 12, 1906. State the amount expended by the Company for construction during the period covered by that report as shown by the report.

A. The total charged to construction, as shown by the report, was $283,012.90; the net proceeds of land department, $1,088,544.94; balance of discount on sale and exchange of se-

curities, $314,171.07; making a total, as per Ex. V, of $1,685,728.91.

Q. That is the amount shown on Ex. V?

A. On Ex. V.

Q. Now please state the amount expended for equipment during the same period, as shown by that report.

A. The amount shown as total equipment on the statement, which corresponds with Ex. V, is $516,309.76; but I want to raise a question here, as in the case of the lands sold: We made an arbitrary credit to our general equipment account and capital of $2,000,000 for depreciation. That depreciation extended over a number of years; and it is a question that may come up for consideration as to whether it ought not to be added in this amount for this year. That is, the total expenditure for equipment was $2,516,309.76.

Q. During the period covered by that report, according to the report, there had been actually expended by the Company, for equipment, $2,516,309.76?

A. Yes.

Q. In preparing the report, you charged off for depreciation, two million dollars?

A. Yes.

Q. Please restore that two million dollars and then state the amount which was spent during the period covered by that report for equipment.

A. $2,516,309.76.

Q. Now, will you please change Ex. V to correspond with that last statement of yours?

Witness does as requested.

Q. I now hand you the report of the Northern Pacific Railway Company to the State of Minnesota for the year ending June 30, 1907, verified by Howard Elliott and H. A. Gray, October 3, 1907, and ask you to state the amount expended for construction during the period covered by that report, as stated

by the report.

A. The amount shown as total construction was $5,063,295.64; adding the net proceeds of land department, $1,645,132.32, and balance of premium on sale and exchange of securities, $28,595, makes a total of $6,737,022.96, as per Ex. V.

Q. That is for the amount expended during the period covered by that report?

A. Yes.

Q. There is an additional charge to construction shown in that report, is there not?

A. Yes.

Q. Will you please read that?

A. Additions and betterments, $3,730,916.85; also, under the column headed "Total cost to June 30, 1906," $18,162,597.90; a total cost to June 30, 1907, for additions and betterments charged to construction, of $21,893,514.75.

Q. Where did that charge and the items composing it come from, Mr. Gray?

A. The items appear in the reports from year to year since 1898 or 1899; they were items which the Company could with perfect propriety have charged to capital account from year to year as the expenditures were incurred, but which, at the time, it was decided to charge to income account. As of the 30th of June, 1907, the item of $18,162,597.90 was transferred from income account or from profit-and-loss account, into which the income account is closed, and charged to capital account, and the corresponding expenditures during the fiscal year ending June 30, 1907, were charged to capital account instead of being charged to income account.

Q. Then the items composing this additional twenty-one millions had been charged to income account?

A. The items composing the eighteen millions had been charged to income account.

Q. The items composing the eighteen millions?

A. Yes.

Q. And the additional three millions was for the current year?

A. Yes.

Q. But items of the same character?

A. Yes.

Q. By income account you mean the same as the operating expenses?

A. No; not a penny of it had been charged to operating expenses.

Q. But they had all been paid out of earnings?

A. Yes.

Q. And, having been paid out of earnings, they were charged against the earnings?

A. I wish to correct that to this extent: That when I say paid out of earnings I mean that they were charged against the earnings.

Q. Well, they were paid from the earnings, were they not?

A. They were paid from the general treasury of the Company.

Q. Yes, and charged against the earnings?

A. Charged against the income account of which the earnings form an item.

Q. The items making up the three millions for the year now under consideration are not shown in the report?

A. I am not sure that I understand the question.

Q. The report does not show the items making up the three millions for the year now under consideration?

A. For that particular year they are not shown in detail.

Q. Mr. Gray, will you furnish an itemized statement of the items going to make up the $21,893,514.75 which were added to construction account in the report for the year ending June 30, 1907, under the circumstances which you have explained?

A. How far do you wish them to be itemized?

Q. Well, the items making up that amount.

Mr. DURMENT: And for each year as they were expended.

Q. Following the form of this report.

A. I want to explain, that the form of that report cannot be followed very closely. We have a form that we have used ourselves, and if it would be acceptable, it would save us a good deal of work, and of course I should want you to say whether it gave you the information you desired; in other words, it would be a good deal of work to redistribute all the items covering the years in question to correspond with any exactness to the report of the construction form. This is the general form that we have used ourselves, and if that would be satisfactory, I would be glad, in that general form, to make such a statement.

Mr. HOW: Why isn't the fifth column in Complainant's Ex. 15—Gray, sufficient for your purposes? That shows the improvements and betterments September 1, 1896, to April 30, 1908, itemized.

Mr. DURMENT: Not year by year, however.

Mr. HOW: Not year by year, no.

By Mr. DURMENT:

Q. I am asking for my own information and not as a matter of evidence in this case: Mr. Gray, if—

Mr. HOW: I want to enter my protest. I understand that questions asked and answers given by the witness on the stand are given under oath and are a part of the record, notwithstanding the protest of counsel that he doesn't desire them in the record.

Mr. O'BRIEN: Counsel doesn't state that he doesn't desire it in the record.

The MASTER: The witness is now being examined, and of course, it is your right that every question that is asked him while he is on the stand goes into the record, and every answer is taken. If you want a recess for the purpose of talking to

the witness, there is no objection to your taking it.

Mr. DURMENT: I am not asking for a recess; I am willing to put it in the record. This question which I ask is proper cross-examination, so far as that is concerned. I am asking it primarily for my own information and not as a matter of evidence. If the other counsel want to use it as evidence, I have no objection; it may go into the record for what it is worth.

The MASTER: The question, if asked while the witness is under examination, will go into the record, and the question will be recorded in the record as well as the answer.

Mr. DURMENT: No objection to it at all.

Q. Mr. Gray, you have said that if we would take this itemized statement as to the twenty-one millions and over in question, and distribute it year by year according to the method of this distribution used by your Company and exhibited to us on page 8 of some printed record which you handed us, it would save much work—page 8 of the third annual report of the Northern Pacific Railway Company for the fiscal year ending June 30, 1899. Would an itemized statement distributing that twenty-one millions and over on that basis, year by year, enable a bookkeeper to check up from the books of the Northern Pacific Railway Company and determine whether it includes any items which have already been charged to construction in these various reports to the State of Minnesota which have been referred to?

A. He could determine from the books without any statement; the books are quite clear and intelligible to any competent examiner.

By Mr. O'BRIEN:

Q. Then you will furnish us this detailed list, according to the form used by you in your annual report to the stockholders?

A. If you desire me to do so.

Q. Well, that is what you asked, wasn't it? You prefer to do that?

A. I say that if you desire me, I will furnish you that list.

Q. Yes, we would be satisfied with that.

A. Very well, I will do so.

Mr. DURMENT: And can that be done year by year?

WITNESS: Yes.

Q. Now, Mr. Gray, you have not given us the amount charged or expended for equipment during the year covered by the last report to the State as stated in that report.

A. The total amount, as shown by the report, expended during the year, was $11,178,163.28; from which we made a further deduction, for depreciation, of $5,926,753; leaving a balance of $5,251,410.28, as shown by Ex. V.

Q. Now, will you please change Ex. V so as to show the total amount expended for equipment during that year? (Witness does so.)

Mr. HOW: Now, will you state what it does show? Ex. V as corrected shows what?

WITNESS: It shows $11,178,163.28.

Mr. HOW: For the year 1907?

WITNESS: Yes.

The MASTER: That is without deducting for depreciation?

Mr. O'BRIEN: That is without deducting. We will have a corrected copy made and substituted (referring to Ex. V).

Q. Mr. Gray, in the total amount expended for construction and equipment, as shown in Ex. V as corrected by you, there is included a large amount spent for right-of-way and real estate, is there not?

A. Yes.

Q. Can you give a statement showing the total charged for right-of-way and real estate in the reports from which Ex. V was made up?

A. I don't know whether I could show it prior to 1896 or

I can show it readily since that date.

Well, these reports are all here in the office now.

Yes.

And will you have a statement to that effect prepared, back as far as you can with those reports?

Yes.

How: Mr. Gray, I shall advise you that they cannot e any unreasonable amount of work in your department. offer the records of your department for their own in- ation, or at least unless they will pay the cost, it seems that you are assuming for your department a very large nt of work.

NESS: It is not a matter of cost, Mr. How, but it is an tunate time of the year; we are now, at the latter end of closing up our accounts for the fiscal year; we have five s to make to the Interstate Commerce Commission, and ate reports besides, in addition to our own annual statis- nd annual report, and the weather is hot and the boys are d pretty hard, and this work can only be done by special so that if it was a different time of the year it would not o hard on us as it does just now.

How: Is it not work that their experts can do, being ed access to your books, as well as you can?

NESS: Just as well.

How: I suggest that you can place the burden upon if you desire.

NESS: Well, I have been anxious to be accommodating as possible, but for the reasons given by me it is burden- to do that work, or much of it, at this time.

Well, I suppose any work in connection with this matter densome, Mr. Gray?

Well, it is aggravated, as I say, by the conditions that I nentioned.

This is a rather important question in connection with

the exhibits which you have presented, I think. Will you do it?

A. I decline to do it, for the reason that these figures for the exhibits have been drawn off by the State's representative, and the details for this statement have got to be drawn off from the same sources.

Q. We now offer to pay any reasonable cost of the doing of that work.

A. As I have stated, it is not a question of cost.

Mr. How: Let me ask: Can you practically get men to do it?

WITNESS: I don't know where I could get a man or men that I would care to bring in here and go through our books and draw up those figures. Of course, this particular thing is supposed to be a matter of drawing if off from the State reports.

Q. We will do it here, Mr. Gray. If the parties want to be accommodating they can do it in the simplest way; if not, we will take up the Master's time and do it here. I notice the statement from counsel and witness about their accommodation is always made when they are refusing to do something.

Mr. How: I hope it is clear to the Master that Ex. V has been made by the State's representatives from these reports. Now, they ask us to detail these reports. Mr. Gray says that he hasn't men that he can put at the work practically, they are all overworked—and can't get men. Now, they charge us with refusal to accommodate the Master because we won't do the work, and they are being made up from reports in their own possession, reports on file with the State, and are going to make them up in the testimony, and I don't see how I can help it.

Mr. DURMENT: We are not going to make up a statement; we are going to find out some facts.

The MASTER: If the testimony that is proposed to be offered is the insertion of tables, it is better, if practicable, that those tables should be made up otherwhere than before the Master, but

if it can't be done, the Master has to sit and receive the testimony.

Mr. O'BRIEN: I insist that any ordinary clerk of ordinary intelligence can go over these reports in an afternoon while we are working here and make a statement. If we have it done, before Mr. Gray can testify to it he must verify it in some way or other, and we desire that this matter be put in in connection with Mr. Gray's testimony; but, if we have it done at the Capitol, it is not prepared under his direction, and consequently, in order for him to accept it, he must make this examination while these are under his own direction.

The MASTER: If you have it done, it will have to be submitted to Mr. Gray, and Mr. Gray can have it checked up and then it can be used.

Q. In the report for the year 1876 is there any amount stated?

A. For cost of right-of-way?

Q. Yes.

A. None.

Q. Or for real estate?

A. Nothing said about real estate in the blank.

Q. Examine the report for the year 1878.

Mr. HOW: You mean the blank does not call for any expenditures for real estate?

WITNESS: That is what I mean.

Q. But the blank does call for expenditures for right-of-way?

A. Yes.

Q. But there is nothing given?

A. There is nothing given.

Q. 1878, what is given there?

A. There is nothing given.

Q. 1879? (Showing witness report to the State of Minnesota.)

A. Nothing given.

Q. For either right-of-way or real estate?

A. For either.

Q. I hand you the report for 1880 and ask you if there is anything shown to have been expended during the period covered by that report for right-of-way or real estate.

A. No.

Q. I hand you the report for the year ending June 30, 1880, and ask you if according to that report any sum was expended for real estate or right-of-way, during the period covered by the report.

A. The report does not seem to call for the information contained in the written reports, and I can find no item for real estate or right-of-way.

Q. I hand you the report for the year ending June 30, 1881, and ask you the same question.

A. Nothing.

Q. I hand you the report for the year ending June 30, 1882, and ask you the same question.

A. Nothing.

Mr. HOW: These are all reports to the State?

Mr. O'BRIEN: All the reports which I have shown you are reports to the State and which I propose to show you.

Q. I now hand you the report to the State for the year ending June 30, 1883, and ask you the same question.

A. Nothing shown.

Q. I hand you the report to the State ending June 30, 1884, and ask you the same question.

A. Nothing shown.

A recess was here taken until 2 o'clock P. M.

Witness H. A. Gray recalled for further cross-examination.

By Mr. DURMENT:

Q. Mr. Gray, I call your attention to your Ex. 15, which purports to show the Cost of Construction and Equipment of the Northern Pacific Railroad and Railway from September 29,

to April 30, 1908, as shown by reports made to the Inter-
Commerce Commission to June 30, 1907, the expenditures
that date being added from the Company's books. Now,
derstand that that statement is made up according to the
ification prescribed by the Interstate Commerce Commis-
?

Yes.

And on that I find an item "Right-of-way and station
nds," and, following it, an item "Real estate."

Yes.

As I understand it, those terms are used to include, or
nclude, in this statement, the matters which the Interstate
merce Commission requires to be included in it?

Yes, sir.

I show you this classification of "Construction and
ipment Expenditures" as prescribed by the Interstate Com-
ce Commission, "Washington government printing office,
" and, on pages 8 and 9, an explanation of what is meant
"Right-of-way and station grounds" and what by "Real es-
" is that the classification you refer to?

. Yes.

r. DURMENT: In connection with this witness and as pre-
nary to the next question, I offer this "Right-of-way and
ion grounds" and "Real estate" and the explanation of
n in this classification. I will have them written in at
point, if I may.

he same was read, as follows:

2. RIGHT-OF-WAY AND STATION GROUNDS. To this account
ıld be charged the cost of land acquired for roadbed (of
ssary width, conformably to depth and slopes of excava-
s and embankments) station and terminal grounds; also
cost of land purchased for ingress or egress to or from sta-
ground; salaries and expenses of counsel, right-of-way
ıt, and of engineers and assistants when especially engaged

upon such matters; stakes used to denote right-of-way limits; expenses of appraisals or of juries, commissioners or arbitrators in condemnation cases; cost of removal of buildings when upon right-of-way, station or terminal grounds, but not included in property purchased; stationery supplied right-of-way agent, engineers and assistants, engineer's instruments, etc., when used for such purposes; commissions paid outside parties for purchase of properties for these purposes; cost of plats, abstracts, notarial fees, recording fees, etc.

Note particularly account No. 3 "Real estate" as regards the cost of property purchased but not required for the operation of the road.

"3. REAL ESTATE. To this account should be charged the cost of all land purchased by the Railway Company in excess of that actually required for roadbed, station, or terminal grounds, or other specific purpose, including all expenses incurred in connection with such purpose as enumerated in account No. 2 Right-of-way and Station Grounds. A portion of the cost of land purchased outside of right-of-way for borrow-pits or waste banks should be charged to this account.

"Note. The amount to be charged to real estate should be an estimate of the salable value of said borrow-pits or waste banks after completion of the road."

Q. Will you please state the total amount paid for the right-of-way and station grounds from September 29, 1875, to April 30, 1908, and state from what funds or accounts the same was paid?

A. The total amount expended during the period named for right-of-way and station grounds was $2,471,229.33. Of this amount $58,190.08 was charged to operating expenses by the Northern Pacific Railroad Company, prior to August 31, 1896, and $99,983.72 was charged by the Northern Pacific Railway Company to income account, but afterwards transferred to capital account.

Q. Will you state the total amount paid for real estate from September 29, 1875, to April 30, 1908, and to what accounts they were charged or from what accounts paid?

A. The total amount paid for real estate was $4,849,371.90, of which $33,229.50 was charged to operating expenses by the Northern Pacific Railroad Company prior to August 31, 1896.

Q. As I understand it, in neither of these two items is there included any amount for the cost of the right-of-way of constructed roads purchased?

A. That is right.

Q. I understand that this first item of $2,471,229.33 includes all moneys paid for right-of-way, terminals or dock properties (I mean by dock properties the land on which docks stand) which were in fact in use?

A. It does not include right-of-way, or land on which docks or wharves stand, that being provided for by another account in the classification.

Q. As I understand it, this item of $4,849,371.90 is the total amount paid for real estate not in actual use for railroad purposes on April 30, 1908, but held for future use by the roads for railroad purposes, excepting docks?

A. I am not able to say that it was not in use on April 30, 1908. When it was originally purchased it was not in use for railroad purposes but it may have become so since.

Q. In these two items, then, would be included the amounts actually paid by the Railroad Company for all right-of-way and real estate, including terminals, excepting such as have been purchased for docks?

A. Docks and wharves.

Q. Will you state whether this Ex. 15 shows the amount paid during the period covered by it as shown in the caption for wharves and docks, and if so, state the item and amount?

A. Docks and wharves, $1,683,688.53.

Q. Also state from what accounts these items were paid or

to which they were charged.

A. Of this amount the Northern Pacific Railroad Company, prior to August 31, 1896, charged $71,257.09 to operating expenses; the Northern Pacific Railway Company, since that date, has charged $956,670.89 to income account, but transferred it to capital June 30, 1907.

Q. Now, do these three items—that is, I mean these three grand totals which you have read from this Ex. 15—cover or include all the moneys paid by the Railroad Company on September 29, 1875, to April 30, 1908, for right-of-way, real estate and dock properties?

A. They do, excepting the real estate, right-of-way and dock property that may be included in the item of "Purchase of constructed roads." I will have to qualify my evidence, to the effect that, in addition to docks and wharves, the classification of the Interstate Commerce Commission provides that the account of Grain Elevators includes the cost of ground on which elevators are located; that Storage Warehouses includes the cost of ground on which storage warehouses are located; that Electric Motor Power Plants includes the cost of ground on which electric motor power stations are located.

Q. Do all these classifications which you have referred to—Grain Elevators, Storage Warehouses, Electric Motor Power Plants, Docks and Wharves, appear upon your reports to the State of Minnesota since 1896?

A. They do if we have any of them. I don't recall that we have had any charges of that classification.

Q. Does your Ex. 15 include anything for any item in which there is included the lands upon which grain elevators stand or storage warehouses stand or electric motor power plants stand?

A. In that exhibit there is an item for sidings, yards and terminals, which is taken from our betterment and improvement classification and is not found in the Interstate Commerce Commission classification in that form, in which there

are items that include cost of lands.

Q. What is the total of that item as shown on your statement?

A. The total for the whole period was $11,969,668.11.

Q. How much of that is lands, do your books show?

A. I am afraid not, as a large portion of it was purchased from the Great Northern Railway Company for our share of terminals at Seattle and I don't think that the statements we have had from them show just what was lands and what covered other accounts.

Q. Will it show except as to the amounts paid to the Great Northern for terminals?

A. I couldn't tell without an analysis of the whole account.

Q. And can you state how much of it was paid the Great Northern for terminals?

A. Not from memory. I don't think we have got through with the payments yet.

Q. Are any of the items in that amount which make up that $11,969,668.11 included, either under the head of Real Estate or of Right-of-way and Station Grounds in this Ex. 15?

A. There is no duplication.

Q. And have any of those items as yet been charged to construction account or to capital account?

A. With the exception of $430,205.15 charged to operating expenses prior to August 31, 1896, the whole amount has been charged to capital account.

Q. Including the amount paid to the Great Northern up to this time?

A. Yes.

Q. I will ask you at your leisure to tell us how much of that $11,969,668.11 was paid for the purchase of lands.

A. I will try what I can do for you.

Q. There are no other items in that statement than those

you have mentioned this afternoon including the cost of lands, are there?

A. I believe not.

Q. In the reports made by you to the State of Minnesota from the time the Railroad Company began making reports to the State, you have included in those reports, under the head of "Cost of Road, Equipment and Permanent Improvements" every item, have you not, which goes to make up, in this Ex. 15, right-of-way and station grounds, real estate, docks and warehouses, and this last item you have mentioned of $11,969,668.11?

A. Yes.

Q. You have included in these reports made up by the Railway Company to the State of Minnesota every item of expenditure for the purchase of property which has gone to make up the railroad as operated?

A. Yes; in other words, the reports as made to the State and shown on the page correspond with the total amount shown in this exhibit.

Q. In the reports made by the Railway Company beginning in 1897 and down to the present time, you have included in those reports, under the head of "Cost of Road, Equipment and Permanent Improvements," every expenditure made by the road for any property which was used or intended to be used for railroad purposes?

A. Yes.

Q. So far as you know, that was true of the reports made by the Railroad Company prior to the time of the Railway Company taking over the property?

A. I can only answer that from my knowledge of the men that made the reports, I believe their reports to have been correct.

Q. And if correct, they should have included that information?

A. Yes.

Q. In this item in your Ex. 15—$1,683,688.53—docks and warehouses are included, not only the cost of the ground upon which the docks are built, but the amounts paid for the construction of the docks?

A. Yes.

Q. And warehouses, if warehouses were constructed?

A. Yes.

By Mr. O'BRIEN:

Q. Mr. Gray, I call your attention to Ex. 16—Gray. Will you state what that statement is?

A. It shows the sources from which funds were obtained for additions to the property from September 1, 1896, to April 30, 1908, corresponding to the columns in Ex. No. 15, or the columns showing a total of $128,184,985.82.

Q. Do I understand that in addition to the prior lien bonds which were used for the purposes of reorganization, there was cash received by the Railway Company from prior lien bonds of $19,588,560.99?

A. That was the amount of cash received for the bonds sold.

Q. For the bonds sold.

A. In addition to what we issued at the time of the reorganization.

Mr. HOW: For reorganization purposes.

Q. And, in like manner, there was received from the proceeds of the general lien bonds issued, cash $2,920,000?

A. Yes.

Q. There was also received in cash from proceeds of St. Paul and Duluth division bonds issued, $5,398,227.78?

A. Yes.

Q. The next three items on Ex. 16 represent no cash received?

A. No, there were liabilities assumed as representing the purchase of assets.

Q. Were those bonds actually outstanding?

A. Yes.

Q. I mean those three.

A. Yes.

Q. And the assumption of those bonds constituted part of the purchase price of the St. Paul & Duluth road?

A. Yes.

Q. Did the assumption of those bonds have any connection with the land-grant of the St. Paul & Duluth road which was deeded to the Northwestern Investment Company?

A. None whatever.

Q. And the lands deeded to that company of the St. Paul & Duluth land-grant are not pledged to the payment of those bonds?

A. No.

Q. The next item, "From Washington Central Railway bonds in hands of public, the interest on which is guaranteed by Northern Pacific Railway Company, $1,538,000," was the amount of cash received by the Railway Company?

A. No. It is somewhat different and yet substantially the same as the other three items. That is, the Washington Central Railway is part of the Northern Pacific System, operated as such, and in order to a correct statement of the accounts it was necessary to show this liability here, although the Northern Pacific Railway Company is liable only for the interest.

Q. Is that railway operated by the Northern Pacific Railway Company?

A. As part of its system.

Q. Is it the owner of the land and railway?

A. It is really in the nature of a lease, but my recollection is that it is a very long time, either 99 years or 999, I don't recall which just now; and there is no separate account kept of its operations, it is treated as if it were an integral part of the Northern Pacific System.

Q. And the guaranteeing of those bonds was a part of the consideration?

A. Yes.

The MASTER: Guaranteeing the interest on the bonds?

Mr. O'BRIEN: Guaranteeing the interest on the bonds, yes.

Mr. HOW: Of course, they will have to pay the principal on the bonds in order to protect their property.

Q. Are all of the securities of the Washington Central Railway Company owned by the Northern Pacific?

A. All of the capital stock of that company is owned, but only $315,000 of the bonds are owned, the remainder of the bonds being what is stated here as "in the hands of the public."

Q. "From net land receipts, $25,026,337.58?"

A. Yes.

Q. How much of that has been used in the construction of the road or the purchase of equipment?

A. All of it.

Q. All of this under Land Receipts?

A. Yes, sir.

Q. The Northern Pacific Railway Company has paid, or agreed to pay, one-half of the present cost of the construction of the Spokane, Portland & Seattle railway, has it not?

A. Yes.

Q. That would be one-half of $47,000,000?

A. Yes.

Q. Has that amount been paid out of these funds?

A. It is not so shown here. It is proper to explain, at this point, that the items following on from this, have gone into the general treasury of the Company, and out of the general treasury of the Company payments have been made, and, among the rest, advances on account of the Spokane, Portland & Seattle Railway.

Q. But this Ex. 16 represents the total cash received by the

Railway Company since September 1, 1896, other than earnings?

A. Well, it might be said, in a way, that the last item represents a small portion of the earnings.

Q. Well, with the exception of that item?

A. Yes.

Q. It represents the total cash received?

A. Yes.

Q. Then from the income of the Company, other than earnings, there must be deducted the amount paid on account of the Spokane, Portland & Seattle, must there not?

A. When you say "income other than earnings" you bring in a complication into your question. In addition to the items shown on here, the Company has received gross revenues in excess of its expenses, taxes, interest, rentals and dividends, and out of the surplus, so arrived at, except as provided by this item here, moneys have been advanced to the Spokane & Seattle Railway; or, as I have said before, that these all went into one common pot and the money was taken out of that pot as it was required.

Q. You mean that the receipts of the Company, whether from rates, from earnings, from rentals, or from sale of securities, have gone into one general fund?

A. Yes.

Q. Those funds, however, have been kept separate upon the books, have they not?

A. No, not as funds. You are raising a question now that is getting to be a technical one amongst the railroad commissioners and the accountants. When we speak of funds, the only actual fund we have now is our insurance fund.

Q. What you mean by that is where you absolutely segregate the funds themselves?

A. Yes.

Q. But you keep separate accounts of the funds?

A. No. For instance, take our revenue receipts, if I may use the word to explain how they are handled, we receive earnings from the transportation of passengers and freight, for mail and express and miscellaneous matter, and those earnings are credited, at the end of the year, to income account. We pay, during the year, operating expenses and taxes, and interest on bonds, and rentals on roads leased by us, and dividends to our stockholders, and that is all charged to income account, and the income balance at the close of the year is transferred to the profit-and-loss account. You can call the profit-and-loss balance a fund if you please, with the understanding on all sides as to what you mean by it, but it is not a series of funds, it is a balance. Then, beside that, we sell bonds, for instance; the money received from them goes into the treasury of the Company. We did, up to a few years ago, keep what was known as a department and enlargement fund, but we found that our operations exceeded the amount that could be put into this fund and we simply dropped it as having no practical value. We have one treasury, into which all moneys from all sources go, and out of which all moneys from all sources are paid, and this statement simply purports to show, in a general way, where the money came from or how we got money to pay for all this additional property that we have purchased and built and acquired in various ways.

Q. Have you charged or credited to any account the amount expended for the construction of the Spokane, Portland & Seattle?

A. That stands as an open account upon our ledger charged against that company.

Q. And the account is credited with that?

A. Cash.

Q. Cash is credited and the Spokane, Portland & Seattle Railway is debited?

A. Yes.

Q. Eventually that will become a charge against what account?

A. The Portland & Seattle.

Q. Yes.

A. That company, supposedly, will pay for it, pay us back what we have expended on account of it.

Q. So it will never be included in construction account?

A. Never, unless some change takes place of which I have never heard the slightest inkling.

Mr. How: But that is a matter that you will not direct, anyway, is it not, Mr. Gray?

A. I have no control over it whatever, no voice in it.

Mr. How: You don't know what is going to be done?

WITNESS: No.

Q. Does not this total of $128,184,985.82, of the sources from which funds have been obtained for additions to property as contained in Ex. 16, include the sources of the funds used so far in the construction of the Spokane, Portland & Seattle Railroad?

A. There is no duplication.

Q. I don't think there is, either, but I am asking you if it doesn't include it.

A. The thing is this, that if you put a lot of ingredients into a pot and make a pot of soup of it, you can never segregate them again until you come to take them out.

Q. Now, Mr. Gray, if I have made myself clear, there is no question that you understand what I am trying to establish here, and your reports since 1896 show a certain amount expended for construction—

A. Yes.

Q. —then you give the sources from which those amounts have been received?

A. Yes.

Q. Now, I ask you whether or not that total does not also

include the amount expended on this railway.

A. Certainly not, because if it did there would be a duplication.

Q. Does that mean that, because you show a fund in excess of the amount that you have actually expended, there is necessarily a duplication?

A. The thing is this, and it ought to make it plain, that we had enough funds in excess of this 128 millions to enable us to advance moneys to the Spokane, Portland & Seattle Railway Company. This does not purport to be all the funds of the Company from all sources during the period, it simply provides sufficient cash to cover these construction and equipment expenditures, but we had, in excess of that, cash from other sources, out of which we have made advances to the Spokane, Portland & Seattle and other proprietary companies.

Q. As a matter of fact, the total expenditures, as reported since the reorganization of 1896, to the State of Minnesota, do not amount to 128 millions, do they?

A. I don't know. I am quite confident, Mr. O'Brien, that we have reported to the State of Minnesota from September 1, 1896, to June 30, 1907, and adding the expenditures since, to April 30th, 1908, $128,184,985.82.

Q. That reminds me of something that we overlooked this morning. How much, according to the books, was expended from June 30, 1907, to April 30, 1908?

A. The total amount of construction was $19,853,881.74; new equipment, $2,961,158.44; making a total of $22,815,040.18.

Q. Have you the report of the reorganization managers of 1896?

A. I have.

Q. I hand you a copy of that report and ask you to examine it and see if that is a printed copy.

A. It is.

The report referred to was marked for identification Defend-

ants' Exhibit W—Gray.

Q. Under the plan of reorganization, the reorganizers delivered to the syndicate how many shares of common stock, in dollars,—the amount retained by them?

A. $77,500,000 of the new common stock.

Q. Of the new common stock of the Railway Company,—and how many shares of preferred stock?

A. $18,767,825 of the new preferred stock.

Q. Will you turn to statement No. 5 of the report of the reorganization managers and state the amount of the common stock which was used by the syndicate in taking up the old stock deposited by the public?

A. Statement No. 5 does not show that.

Q. They exchanged it share for share?

A. If you look at No. 4 I think it would answer your question.

Q. No, No. 4 gives the total amount used for assessments and conversions, but all of that stock that was not converted was retained by the syndicate from the amount delivered to them and the syndicate paid the assessment on them?

A. I don't know.

Q. Well, I ask you to turn to statement No. 5, and doesn't that show the amount of the old common stock deposited by the public?

A. Yes.

Q. And how much was that?

A. $42,114,900.

The MASTER: That was the old stock?

WITNESS: That was the old stock.

Q. And the syndicate issued to those old stockholders, share for share of that stock, upon the payment by the old stockholders of $15 per share?

A. That is, if they did pay the $15 per share.

Q. Yes. Now how much of the old preferred stock was de-

posited by the public?

A. $33,713,130.82.

Q. And the syndicate delivered to those old stockholders a one-half share of common stock and a one-half share of preferred stock for each share of the old preferred stock upon the payment by the old preferred stockholder of $10 per share on his old stock?

A. Yes. Always with the provision that they did pay the $10 per share.

Q. But the syndicate retained the amount of stock which you have already stated was delivered to them and had the privilege of paying the assessments of the old stockholders in case of their failure so to do?

A. Yes.

Q. So that if the statement in Exhibit 5 correctly states the amount of old stock surrendered and assessments paid, the difference between that and the total stock delivered to the syndicate would show the amount of stock retained by the syndicate?

A. I find, in table No. 4, that this same report of the reorganization managers states that $66,619,100 of the common stock was used for conversions and assessments and that there was sold to the syndicate $10,880,900 of the common stock.

Adjourned until Wednesday, July 29, 1908.

Wednesday A. M., July 29, 1908.

The hearing was resumed at the office of the Comptroller of the Northern Pacific Railway Company at 10 o'clock A. M.

H. A. GRAY,
recalled for further cross-examination, testified:

By Mr. O'BRIEN.

Q. Mr. Gray, will you produce the agreement between the

syndicate and the re-organization managers at the time of the re-organization of 1896?

A. It is in this book.

Agreement marked for identification Defts. Ex. X—Gray.

Q. Now, will you please read into the record clause 1 of the agreement between the syndicate and the re-organization managers.

A. "The syndicate will take and pay for, and the managers will sell and deliver, the following new securities when issued: $7,775,000 of the new four per cent prior lien mortgage bonds; $1,172,880 of the new three per cent general mortgage bonds; $18,767,825 of the preferred stock (trustee certificates); $77,500,000 of the new common stock (trustee certificates) for the sum of $19,873,830 in cash, plus any interest accrued on the bonds when delivered."

Q. Will you now please read into the record paragraph 7 of the agreement between the syndicate and re-organization managers, which has been marked Ex. X.'

A. "The syndicate hereby authorizes the re-organization managers in and by the proposed plan to offer for account of the syndicate to depositing holders of the preferred stock of the Northern Pacific Company at $10 per share, preferred stock of the new company to the amount of 176,192 shares, and common stock of the new company to the amount of 176,192 shares, and to offer to depositing holders of the common stock of the Northern Pacific Company at $15 per share common stock in the new company to the amount of 490,000 shares upon the terms and in the manner provided in said plan and agreement, and the re-organization managers hereby agree to make such offer. All the moneys paid by the depositing holders of the preferred or common stock of the Northern Pacific Railroad Company under said plan and agreement shall be credited on account of the amount payable by the syndicate under article 1 hereof, and may be used by the re-organ-

ization managers for any purpose of the re-organization."

Q. Now, those shares of stock, so to be delivered by the re-organization committee, in return for old stock and paying this assessment, were to come out of the stock sold to the syndicate, under paragraph 1?

A. Yes.

Q. Will you now turn to the report of the re-organization managers and state the amount, according to that report, of old common stock deposited by the public?

A. $42,114,900.

Q. And the amount paid by the old depositing stockholders at $15 share would amount to how much?

A. $6,317,235.

Q. What was the amount of old preferred stock deposited and surrendered by the public under the plan as stated in the report of the re-organization committee?

A. $33,713,130.82.

Q. And at $10 per share, how much would the assessment paid by the old stockholders amount to?

A. $3,371,313.08.

Q. Those amounts are properly chargeable to the syndicate unless they are credited upon the sum of $19,873,830 which the syndicate agreed to pay, are they not.

A. Yes.

Q. I ask you to turn to the statement which has been identified as Ex. Y and ask you whether or not the item therein appearing under "Syndicate Receipts," exclusive of the last item, "sold to syndicate three per cent G. L. bonds $3,031,000," are not correctly set out according to the testimony you have just given.

A. There is a discrepancy in the item in regard to the three per cent general lien bonds.

Q. What should that amount be?

A. $1,172,880.

Q. Now, I ask you to strike out from Ex. Y this last item which I have just excluded "Sold to syndicate three per cent G. L. bonds, $3,031,000" and state the total of the items making up the syndicate receipts as now stated.

A. $114,904,253.

Q. The syndicate paid to the re-organization managers $19,873,830?

A. Yes.

Q. Of the new common stock delivered to the syndicate, how much was used in the cancellation of the old common stock surrendered by the public, according to the report of the re-organization managers?

A. The report of the re-organization managers shows that of the total issue of common stock of the new company $66,619,100 was used for conversions and assessments.

Q. According to the report of the re-organization managers as to the amount of old common stock deposited and surrendered for substitution under the plan, how much of the new common stock was used to make the exchange with the old common stock and secure the surrender of the common stock?

A. The common stock of the old company, on the payment of $15, was to receive share for share of the new, which would give $42,114,900.

Q. And upon the same report and statement and assumption, how much of the new common stock was used to secure the surrender of the preferred stock so deposited by the public?

A. $16,856,565.

Q. That would make a total of new common stock used for that purpose by the syndicate for which they are entitled to credit of how much?

A. $58,971,465.

Q. Now, of the new preferred stock, according to the same report and upon the same presumption, how much of that was

used to effect the exchange with the old preferred stockholders.

A. $16,856,565, but preferred stock was used for other purposes.

Q. Certainly preferred stock was used for the purpose of retiring the old bonds?

A. Yes.

Q. But that came from the re-organization managers and not from the syndicate?

A. Yes.

Q. Now, please eliminate the next item on Ex. Y, "Cash $1,818,600"—

Mr. HOW: Strike that out?

Mr. O'BRIEN: Strike that out.

Q. —and give me the total of the credit items to the syndicate so far.

A. $95,701,860.

Q. Will you please read clause 8 of the agreement between the syndicate and the re-organization managers into the record.

A. "The re-organization managers shall pay to the syndicate managers for the benefit of the several syndicate subscribers, in proportion to their respective subscriptions, a commission or compensation of 6 and 2-3 per cent in cash on the amount of the subscriptions hereunder, regardless of the amount which the syndicate shall be called upon to pay or advance."

Q. Under that clause, the re-organization managers paid to the syndicate a commission of three million dollars for their services in this matter, did they not?

A. Yes.

Q. Will you please add that to the total syndicate receipts, and that makes the total receipts how much?

A. $117,904,253.

Q. And the total credits to the syndicate, based upon the par value of the securities, of all kinds delivered to them, amount to $95,701,860?

A. Yes.

Q. Leaving a net profit to the syndicate upon the par value of the securities of how much?

A. $22,202,393 in securities at par.

Mr. O'BRIEN: I now ask that we be permitted to take Ex. Y and have it made up in conformity with Mr. Gray's testimony and substitute it.

Q. I desire, Mr. Gray, to call your attention to the statement marked for identification Defts. Ex. Z—Gray, in which you will find a computation as to the cost to the road of maintaining the old securities prior to the re-organization of 1896 up to the date of the maturity of those securities, and the cost to the Railway Company of maintaining the new securities substituted for those old securities up to the date of the maturing of the old securities, including whatever cash was paid at the time of the re-organization on account of the old securities.

Mr. HOW: You say there is another sheet of this?

Mr. O'BRIEN: Yes, there will be another sheet; I don't think the statement is complete.

Mr. HOW: This statement is considerably involved and requires considerable computation, doesn't it?

Mr. O'BRIEN: Yes, I will be very glad to furnish the entire sheet to Mr. Gray and let him examine it until tomorrow morning.

Mr. HOW: That is what I was going to suggest, rather than to take the time of the Master and counsel while he is making these various computations.

The MASTER: I presume he can do it a great deal quicker and easier by himself. Shall we take an adjournment at this time until tomorrow morning?

Adjourned until 10 A. M., July 30.

Thursday, July 30, 1908, the hearing was resumed at 10 o'clock A. M., at the office of the Comptroller of the Northern Pacific Railway Co.

H. A. GRAY,

recalled for further cross-examination, testified:

By Mr. O'BRIEN:

Mr. O'BRIEN: I now hand the Reporter Defendants' Exhibit Y, as corrected under the testimony of Mr. Gray yesterday, and ask that the corrected copy or table be marked as the original and substituted for the original used yesterday.

Q. Mr. Gray, this statement now handed you as Exhibit Y is corrected according to your testimony of yesterday?

A. Yes.

Mr. HOW: There is no objection to the substitution. Of course I don't know as I ought to be called upon to make formal objection to this testimony on the ground that it is immaterial, because it is going in, anyway, that I appreciate; but I do object to it on that ground. I object to all this class of testimony. I don't want my position misunderstood by the Master as the case proceeds.

The MASTER: Not at all. I understand your objections already made are sufficient to cover all this class of testimony.

Mr. HOW: I take it that I need not make my objections of record to everything, because I do think that most of the testimony they have offered is immaterial. They understand why, and I think the Master does. Our theories are diametrically opposed, irreconcilable.

Mr. O'BRIEN: We now offer Exhibit Y in evidence.

Mr. HOW: Well, I thought you had offered it, and I have objected to it.

Mr. O'BRIEN: It is agreed that your objection made shall go to Exhibit Y as now offered.

Q. Mr. Gray, I hand you the paper marked Exhibit Z—Gray,

which was shown to you yesterday, and which you were to examine during the adjournment and state whether or not that statement correctly showed the difference in the obligations of the Northern Pacific Railroad Company immediately prior to the reorganization of 1896 (and by "obligations" I mean bonded indebtedness) and the other indebtedness included in this statement, and the securities substituted therefor under the plan of reorganization, including capital stock issued in retirement of the old indebtedness, dividends already paid upon that stock, future dividends computed at seven per cent per annum, the statement being computed as to each of the old securities up to the date of the maturity of those securities respectively.

A. I examined the statement and had it examined, and found a number of corrections in figuring.

Mr. HOW: A number of errors, you mean?

WITNESS: A number of errors, in figuring; and, in conjunction with Mr. Hillman, the expert of the State Commission, we had a corrected statement prepared.

Q. Will you let me have that statement?

Witness produces statement.

Mr. O'BRIEN: I now ask that this be marked "Defendants' Exhibit Z First Correction," to be substituted for Exhibit Z.

Q. Now, Mr. Gray, will you please point out, if you know of any such items in this statement "Exhibit Z—Gray Corrected," which you claim are not properly included in that statement. and I ask that in answering that question or in so pointing out any corrections you assume the propriety of the making of this statement in the form in which we have made it up; that is, I don't ask you to give your judgment as to whether this is a correct tabulation or not. This tabulation is prepared upon our theory of the case, and I ask you to assume for the purpose of this statement the correctness of the charges therein contained, for future dividends and matters of that sort. I desire that you assume, and insist that you assume, that it is

prepared upon a correct theory, and only ask you to state whether or not there are any of the entries there which upon that theory you can challenge.

A. Assuming the theory upon which the statement is made up is correct, I object to the item on the first page "general first mortgage bonds, sinking fund bonds," making a total of $8,442,000, calling for prior lien 4's to the amount of $10,974,600.

Q. Well, why do you object to that?

A. For the reason that it is a duplication; the entire issue of general first mortgage bonds, as provided for in the first column above, and the entire issue of prior lien bonds applicable to the same, is included in the second column above, and to take in this amount again is practically a duplication.

Q. Were not those bonds shown in the second column?

A. They were.

Q. What was received for them?

Mr. HOW: The second paragraph you mean, not column, don't you?

Mr. O'BRIEN: In the statement under sinking fund bonds.

Mr. HOW: Yes, that is the second paragraph.

Q. Second paragraph. Were not those bonds issued?

A. Yes.

Q. And what was received for them?

A. They were sold for cash.

Q. Was that cash included in the statement of cash receipts found in your Exhibit 16?

A. Yes.

Q. Then I understand that the issuance of those bonds found in the second paragraph, had no reference to the retirement of any of the old securities?

A. No, except as the prior lien mortgage made provision for an issue of prior lien mortgage bonds at a certain ratio in regard to the retirement of the general first mortgage bonds however that might be accomplished.

Q. Is this a correct statement of that matter, Mr. Gray: As shown by paragraph 2 of Exhibit Z First Correction, general first mortgage bonds to the amount of $8,442,000 were paid out of the sinking fund, and upon the surrender of those bonds, under the terms of the prior lien mortgage the Railway Company claimed the right to issue an equal amount of prior lien bonds?

A. Yes.

Q. And the Company thereupon did issue prior lien bonds to the amount of $10,974,600, sold those bonds for cash, and the proceeds have been included and accounted for in your Exhibit 16?

A. Yes.

Q. Under that statement we concede that this second paragraph is not properly in this statement and ask you to draw your pencil through it, Mr. Gray.

Witness does so.

Q. Now, is there any other statement of this account that you desire to object to?

A. On the last page of the statement, there is a table which purports to show the disposition of a part of the cash received from the syndicate managers, part of such cash also having been taken care of in preceding pages, where it was used in the retirement of the old bonds, but this statement, in my judgment, does not go far enough in accounting for the cash received. The statement of the reorganization managers shows a number of items representing the cost of the reorganization and covering reorganization expenses, an amount of nearly three millions and a half of cash turned over to the Company, as the result of the reorganization, aggregating $10,107,916.67, which I think should be deducted from the increase shown in this statement.

Q. Or properly added to the first column on the fourth page?

A. Yes.

Q. Well, how should that entry be made, Mr. Gray?

A. I suggest that it be added as Cash Paid for Reorganiza-

tion Expenses, and Cash Paid over to New Company $10,107,916.67.

Q. Will you please write those entries on Exhibit Z?

Witness pins pencil memorandum on the page referred to of Exhibit Z.

Q. Mr. Gray, will you be good enough to further explain what you mean by this correction and why it should be made?

A. The second column of figures on the last page show that to the syndicate managers were issued bonds and stocks, and then in the carrying out of the syndicate agreement the syndicate turned over to the reorganization managers upwards of twenty-one million dollars in cash, besides other smaller amounts of cash that were received by the reorganization managers, making a total of $22,184,488.75. The first column on the last page shows that a portion of the cash was used in retiring receivers' certificates, the Duluth & Manitoba bonds, and the Northwestern Equipment notes. But it does not go on to account for ten millions of cash that was expended for other purposes as shown in statement No. 1 of the reorganization managers' summary of receipts and disbursements. Inasmuch as the cash so used was the proceeds of securities which are charged up in this statement as against the new company, this item should, in my judgment, be added to the first column.

Q. Conceding that to be true, have you now corrected "Exhibit Z First Correction"?

A. With that concession, and correcting the statement accordingly, and assuming your theory of the statement to be correct, I find—

Q. Any other corrections?

A. I have no other corrections to make.

Mr. How: Have there been any exchanges of confidences in regard to what the theory of this statement is?

If so, I should like to be let in, because I don't understand

it very clearly.

Mr. O'BRIEN: I will be very glad to make a statement of what this is, Mr. How.

Mr. HOW: Yes, I would like to have you. Some of these notes I find are illegible. Here is one.

Mr. DURMENT: Illegible or unintelligible?

Mr. HOW: Well, it may be unintelligible, I should say. Here is "four per cent bonds, preferred stock," in the first column of the last page, about twelve or fourteen lines down.

Mr. O'BRIEN: Second column of the last page?

Mr. HOW: First column. Sold by "R. M.," I don't know what that means.

WITNESS: It means reorganization managers.

Mr. HOW: Well, I might, somehow or other, have found that out, but I don't see how you are going to gather that from the statement. I would like to have you make a statement as to just what this is.

Mr. O'BRIEN: This statement, Exhibit Z, which has been prepared by Mr. Hillman, the expert accountant retained by the Railroad & Warehouse Commission, is a statement of the bonds outstanding at the time of the appointment of the receivers of the Northern Pacific Railraod Company in 1893, with interest upon those bonds, at the rate which they bore calculated to the date at which they would have respectively matured; in the other column is a statement of the securities, both bonds and stocks, which were issued in substitution of the old securities, with interest figured upon the new bonds to the date at which the correspondingly old bonds would have matured, with the actual dividends which have been paid upon the stock so issued, and with future dividends upon that stock, calculated at 7 per cent per annum; the object of the statement being to show the total amount which would have been required to have paid the principal and interest upon the old securities and the total amount which will be required to pay the principal and

interest upon the new securities, together with the stock calculated at par, the dividends upon stock, calculated as I have stated, all calculated to the same date; that is, in each instance the charges upon the new securities being calculated to the same date at which the old securities for which they were substituted would have matured. Do you get that, Mr. How?

Mr. HOW: Yes, thank you very much. It is very lucid and I was afraid there was something more important than that in it. I am relieved.

Mr. O'BRIEN: I now ask that we be permitted to take Exhibit Z First Correction, as corrected by Mr. Gray, and prepare a corrected statement, which we will hand to Mr. Gray in the morning.

Mr. HOW: That is all right.

Q. The difference in those amounts is how much?

Mr. HOW: You mean the difference between the two columns?

Q. The difference between the two columns is how much?

A. $82,131,270.36.

Q. Will you please state the amount that would be required to retire the old securities, principal and interest, with the interest calculated to the date at which they would respectively mature?

A. Do you mean in detail?

Q. No, just the total.

A. I haven't got the totals here.

Q. That is, the amount which will be required to retire the new securities, calculated as I have explained in my statement, is $82,131,270.36 more than would have been required to have retired the old securities?

A. Yes.

Mr. HOW: By securities,—do you include stock in the term "securities"?

Mr. O'BRIEN: Yes.

Mr. HOW: To retire bonds and stock?

Mr. O'BRIEN: Yes.

WITNESS: Yes, if for any reason it should be decided at those dates to retire a corresponding amount of the new securities and stock.

Mr. HOW: Mr. O'Brien, Mr. Gray has another correction.

WITNESS: I didn't desire to make any figures, but to call attention to the fact that the preferred stock of the old Northern Pacific Railroad Company was an eight per cent cumulative stock, while in this statement all stocks have been figured on a basis of seven per cent. In fact, it would not be possible to make any figures except on some agreed basis.

Q. We shall have to insist upon preparing the statement upon our own theory and assumptions, Mr. Gray.

A. Yes, I understand, Mr. O'Brien.

Q. If you desire to present a different statement, you are at liberty to do so, but—

A. I don't propose to do so at this time, but by advice of counsel I mention that fact so that it will be in the record.

Q. Well, we shall have to adhere to our own theory with regard to this statement.

Mr. O'BRIEN: We shall want to present to Mr. Gray Exhibit V, as corrected and completed, and this Exhibit Z. We have found it absolutely necessary, in analyzing these tables and matters, to divide the work between Mr. Durment and myself, and I ask that Mr. Durment be permitted to take the witness at this time.

By Mr. DURMENT:

Q. Please refer to your Exhibit 13, Mr. Gray. I find there an item "Interest and discount $22,104,625.41." As I understand it, that is the amount off the face of securities which were sold by the road which was allowed by way of discount?

A. The discount portion of it; there is some interest in there which is in addition to that.

Q. Well, the substance of it is that for securities issued the road realized, all together, in money that could be used for the purposes of the road, $22,104,625.41, less than the par value or face value, is that it?

A. Well, as I say, there was a matter of interest figured (it would be relatively small) but the great bulk of this item of twenty-two millions consists of discounts so suffered as you indicate.

Q. And the interest, what does that mean, that part of it?

A. That would be the adjustment of interest in connection with the sale of the securities.

Q. Now, I find here an item "Purchase of constructed roads $91,150,127.54."

A. Yes.

Q. I understand that that is the price which the books of the Railway Company show it paid to purchase roads that had been constructed by other companies or owned by other companies?

A. Yes.

Q. Would you please give us a statement (if you can do it from memory, all right, you probably cannot) giving the name of each purchase, when it was purchased, the amount paid for the purchase, and how it was paid, whether in money or bonds, and if so, what bonds; that is, what bonds, and the par value of them, for each purchase, and the title which was obtained by that purchase, whether it was to the road itself, or stocks and bonds of the company that owned the road bought, or whether it was a leasehold interest acquired, making up this $91,150,127.54, which is roads purchased.

Witness hands counsel statement, and same is marked Defendants' Exhibit AA—Gray.

Q. You have handed me a statement which is marked Defendants' Exhibit AA—Gray. This I understand gives the information I just asked for with reference to these purchased

roads of $91,150,127.54?

A. Yes.

Q. The first part of this statement is totalized under the head "Built by outside companies, $35,552,403.89." In the first column there is "Cost to Northern Pacific Railroad for bonds, plus additions;" what does that mean?

A. That means that the Railroad Company after it acquired the roads spent some money on them for additional construction.

Q. Well, it means that opposite each road it spent that much money for construction? that is, the money set opposite there? For instance, the "Clealum Railroad, $234,370.33" appears under "Cost to Northern Pacific Railroad for bonds, plus additions." What does that mean?

A. That means that the Northern Pacific Railroad Company spent probably a portion of that for bonds and added additional construction itself.

Q. Spent a portion of that for bonds; improvements or bonds?

A. Of course, there are a great many of those, and I couldn't from memory go into the details of those.

Q. Well, I want to get a general idea of what it means and then we may not need the details. Then, as I understand it now, take that item "Clealum Railroad, $234,370.33" means that the Northern Pacific Railway Company spent that much money to buy bonds of that railroad company and to improve the road after it bought the bonds; is that what it means?

A. Yes.

Q. How much of that was for bonds and how much for the other you don't know?

A. I do not know.

Q. I find there "Duluth, Crookston & Northern Railroad, $902,966.31" as the cost to the Northern Pacific Railroad Company for bonds, plus additions. Does that mean that the North-

ern Pacific Railroad Company expended that much money in buying the bonds issued by the Duluth, Crookston & Northern Railroad Company and in making improvements on the road after it bought the bonds?

A. Yes, if there were any improvements made.

Q. Now, under the next column there (that is the second column of figures) I find "Cœur d'Alene Railway & Navigation Co." under the head "Cost to Northern Pacific Railroad Company for bonds plus additions $494,492.63," and under the second column of figures headed "Cost of stock to Northern Pacific Railroad Company, $294,975.48." What does that last item mean?

A. It means that in addition to buying a portion of the bonds it bought stock for so much money.

Q. That it paid that much money for stock of that road?

A. For the stock of that road, yes.

Q. Now then, following out that same item, in the third column of figures is, "Bonds in hands of public, $1,238,000"; what does that mean?

A. That means that in addition to the bonds acquired by the Railroad Company there were bonds that the original company had sold and which were in the hands of the public at the time.

Q. At the time the road purchased?

A. Yes.

Q. Then, as I understand it, this first lot of roads which precedes in the statement the words "Total built by outside companies" are roads in which the Northern Pacific Railway Company owns bonds and stock of the company?

A. Yes.

Q. The Railroad Company has not acquired the title to the property itself except by the ownership of bonds and stocks?

A. Did you say "has" or "had"?

Q. Has not at this time?

A. I couldn't say that.

Q. Well, had it at the time this statement was made up, April 30, 1908?

A. I would have to look that up.

Q. These figures that are given here in these three columns that I have spoken of first show the actual money paid by the Railroad Company for these purchases?

A. Well, of course, the bonds in the hands of the public—

Q. No, excluding that.

A. Excluding that?

Q. Yes; that is in the fourth column of figures.

A. Yes.

Q. Now, were those amounts paid in cash or paid with bonds of the Railroad Company?

A. Both.

Q. And do you know at what figure the bonds of the Railroad Company were turned over (I mean of the Northern Pacific), and at what figure the bonds and stocks of the other roads were acquired?

A. Do you want that in detail?

Q. No, I ask you if you can do that now.

A. I couldn't do it from memory.

Q. I will ask you that as to each railroad or property named on this Exhibit AA—Gray preceding the entry "Total built by outside companies" you will furnish us information showing the par value of stocks and bonds, separately, acquired by the Northern Pacific; the amount paid by the Northern Pacific therefor in cash; and the amount, par value, of bonds; or, if any of it was paid by stock of the Northern Pacific Railroad, the par value of stock paid. Following this subdivision we have just been talking about, and between that and the next item, the entry of "Total of branch lines," I find "Miscellaneous branches and spurs built by Northern Pacific R. R. $97,237.46, and branch lines, surveys made by Northern Pacific R.

R. $206,044.19." I assume that this $97,237.46 is the amount which the Railroad Company paid for building branches and spurs which were owned by it?

A. Yes.

Q. That was paid in cash, I suppose?

A. Yes.

Q. Now, what does this next item of $206,044.19 mean?

A. The Railroad Company during the most of its history was making surveys and reconnaissances with regard to feeders for the main line of the Company, and without being able to answer as to these specific items, which were all before my time, that would be the character of them.

Q. This, then, as I understand it, was for surveys made for branch lines which were never constructed?

A. I wouldn't say that. I believe that some of them were constructed afterwards by the new Company.

Q. Where did you get your information from which you made up this item of $206,044.19?

A. This whole amount is part of the report made from year to year to the Railroad Commission.

Q. Including this item of $206,044.19?

A. Yes.

Q. And you got your information from those reports?

A. Yes: got it from the sources of the reports; from the sources from which the reports were made.

Q. And that is intended, that item $206,044.19, to cover the cost of branch lines, surveys, made by the Northern Pacific Railroad Company from the beginning of its existence, or its history, I should say?

A. Oh, no. I am not able to answer specifically. If the amount is of sufficient importance I might look it up, but it is not a large amount.

Q. That is all before your time?

A. That is all before my time.

Q. The next subdivision of this seems to be about six companies in which the interest of the Northern Pacific consists in its ownership of stock in the companies named?

A. Yes.

Q. And one company in which it has purchased a half-interest in twenty-three and a half miles of road?

A. Yes, sir.

Q. It has the title to that half-interest I suppose?

A. Yes.

Q. I notice that under the head of "St. Paul & Northern Pacific Railway," in parenthesis it is stated that all stock is owned by the Railroad Company?

A. Yes.

Q. There is no such statement as to the others. Does the Northern Pacific own all the stock in the other companies mentioned there, or only portions of it?

A. Only portions.

Q. Taking the item "a half-interest with St. P. & D. R. R. in 23½ miles $500,000," that was paid in cash or bonds, do you know?

A. I do not know now. It would not be improper for me to say that the St. Paul & Duluth Railroad is entirely owned by the Northern Pacific now, so that it now owns the whole interest instead of the half.

Q. Under the second column of figures, "Cost of stock of Northern Pacific Railroad Company," those figures opposite each corporation represent the amount which the Northern Pacific paid for the stock in the corporation?

A. Yes.

Q. I would like you to furnish us with the information showing whether it was paid in stock, bonds or cash, and how much of each, as to each one of those corporations, and the par value of the stock acquired in each of those corporations by such purchase.

A. Very well.

Q. I find on this statement, also, "Constructed roads acquired by Northern Pacific Railway Company."

A. Those are roads that were acquired since the reorganization in 1896.

Q. Is the ownership of the Northern Pacific in those roads the fee ownership in the right-of-way and the properties, or is it an ownership of stocks and bonds, or leasehold, as in some of the other cases?

A. In most, if not all cases, it owns the stocks and bonds, but it owns them so completely that it is tantamount to an absolute acquisition of the property itself.

Mr. HOW: Do you know whether in such cases a conveyance has been made or not of the property?

WITNESS: Not definitely.

Q. I will ask you to furnish us, as to each of these roads under that head, information showing what the Northern Pacific paid for the purchase in money, what in bonds, (that is, the par value of bonds) and what in stocks and the par value.

A. These are all cash purchases.

Q. These were all for cash?

A. Yes.

Q. And not for bonds?

A. No.

Mr. HOW: You waive that statement, then?

Mr. DURMENT: Not the whole of it, but a part of it.

Q. Then we would like information, Mr. Gray, showing the par value of the stock acquired, the par value of bonds acquired on that purchase, as to each of these roads; and if it develops that in addition to the acquisition of bonds and stocks in any road, or without the acquisition of bonds or stocks in any road, the Northern Pacific acquired the fee title by direct transfer of the properties to it, or a leasehold title, that information, too.

Mr. How: You don't mean the fee title, you mean the actual ownership? Suppose the railroad didn't have the fee title itself, but had nothing but an easement.

Mr. Durment: Well, perhaps. I mean actual ownership of the title.

Mr. How: Of the physical properties?

Mr. Durment: Yes; and not an ownership represented by the ownership of stocks and bonds.

Mr. How: I think it is clear what you mean.

Witness: Suppose the Company owns all the stock and all the obligations and is in active operation of the property itself?

Mr. Durment: Well, I shouldn't consider that actual ownership of the road; that is the point. There are different points of view; that is the reason I am asking for this information.

The Master: The question would be who owned the road then.

Mr. Durment: Well, I can answer that easily.

Mr. O'Brien: Have to refer to the decision by the Court of Appeals in the Standard oil case on that.

Q. I notice here a note at the bottom referring to the Central Washington Railroad Company, "This road was not included in reorganization of September 1, 1896, and is now operated under a lease."

A. I think I explained as to that before.

Q. Yesterday, I think.

A. Yes. That road is an integral part of the Northern Pacific system; it is not even operated as a separate branch or line. The Northern Pacific Railway Company guarantees the interest on its bonds. It owns all of its capital stock and a portion of the bonds.

Q. And it pays a rental for the use of the road?

A. It pays a rental equivalent to the interest on the bonds.

Q. On all the bonds or only on those held by the public?

A. Well, of course they might all be held by the public; the

lease covers the payment of the interest on all the bonds.

Q. On all of them?

A. Yes.

Q. And the keeping up of the road and keeping it in condition, I suppose?

A. Yes.

Q. And does it provide for the payment of anything else other than interest on all the bonds?

A. The operating expenses, maintenance, taxes and the interest on all the bonds.

Q. Does it provide for any payment of dividends on stock?

A. No.

Q. Or for dividends declared upon stock from time to time since the Northern Pacific acquired the ownership of the stocks and bonds?

A. No, it would not be possible, for the reason, as I say, that no accounts are kept and it is not known whether any dividends are earned or not.

Mr. HOW: It wouldn't seem to make any difference, anyway, if the Northern Pacific had to pay the dividends.

WITNESS: Paying ourselves.

Mr. HOW: Paying to itself as sole stockholder.

Mr. DURMENT: I don't know, it might make a difference in the wind-up, I am not sure.

Q. I find here on this statement, "The stocks of the terminal companies shown in the first period were included as representing part of the cost of the Northern Pacific Railroad Company at the time it was reorganized September 1, 1896. The Northern Pacific Railway Company now holds additional stocks, but these are carried as treasury securities, and appear in that item on the construction statement, as shown in the note thereon." Please explain that first sentence of this note; I don't know that I have a clear understanding of it.

A. Well, for instance, take the St. Paul Union Depot Com-

pany, there is an item of $50,000 there of stock that was owned by the Northern Pacific Railroad Company prior to the reorganization. Since that date the depot company has increased its capital stock and the owning companies have increased their holdings correspondingly; but the additional stock so acquired has been carried as treasury securities; for instance, on Exhibit No. 15, the Lake Superior Terminal & Transfer Railway Company, additional stock of $56,100 is shown, and against it is the statement that the balance of stock held was included in the first period. The same is true as to the St. Paul Union Depot.

Q. Then, as I understand it, the stocks in these terminal companies which was acquired prior to the reorganization is carried in as a part of the cost for the purchase of constructed roads?

A. Yes; partly because it was so reported to the commissions from year to year.

Q. But that, since that time, when the reorganized company has acquired stock in these corporations, it has continued to hold the stock and carry it as an investment?

A. Yes, as a treasury security.

Q. I suppose, as a matter of fact, there is no difference to the Northern Pacific Railroad Company in its interest in, or its receipts from, the stock acquired as a part of the reorganization property and that purchased afterwards, is there?

A. The only difference is in this: That these securities that were acquired prior to the reorganization were put up with the Mercantile Trust Company as muniments of title for the prior lien mortgage, and the stocks since acquired were not so put up.

Mr. HOW: But held in the treasury?

WITNESS: But held in the treasury?

Q. But I suppose that those stocks that were put up really as collateral for the prior lien mortgage—

A. I don't think the word "collateral" would fit.

Q. Well, why?

A. That is rather a question for a lawyer than for—at the same time, I think I have in my own mind a different thing; a collateral is something that you can take out and sell to make good; these muniments of title are not in a form in which they could be taken out and sold.

Q. Well, at any rate, they are owned by the Northern Pacific but are in the hands of the Mercantile Trust Company?

A. Yes.

Mr. HOW: Probably to safeguard their being sold, to protect the bondholders against their being sold.

Mr. DURMENT: Well, possibly.

Q. But what becomes of the dividends and the proceeds of the old stock?

A. Oh, you mean of these particular stocks here now?

Q. Yes.

A. For instance, on the St. Paul Union Depot Company, the dividend accrues to the Company and goes into its income fund.

Q. It doesn't go into the hands of the Mercantile Trust Company?

A. No.

Q. Is that true as to the stocks acquired as a part of the reorganization as well as that purchased afterwards?

A. I may answer that by saying that there are only a few companies like these terminal companies that have any dividends; the stocks are practically defunct, they are buried in the Trust Company as muniments of title.

Q. That may be. There are some of them, though, that it appears do produce dividends; now, the question is what becomes of those dividends, and is there any difference in the disposition of the dividends upon the stocks between those which are in the hands of the Mercantile Trust Company and those

of some corporation which are in the treasury?

A. None whatever.

Q. The Company gets the dividends on all the stocks?

A. On all the stocks.

Q. Whether the stocks themselves are in the hands of the Mercantile Company or in the treasury of the Company?

A. Yes.

Q. In this item of $91,150,127.54, cost of purchased roads, is not included the stocks held in the treasury as a treasury asset, is it?

A. No.

The MASTER: As I understand, Mr. Gray, when you have acquired the ownership of all the stocks and bonds of a road, that road is taken over into your business and is not treated as an independent business concern, as a going concern of itself?

WITNESS: That is right, sir.

Q. Well, we have understood that is true as to some roads and not as to others. That is a matter I expect to inquire into before we get through with this. Of course I don't mean to dispute you, Mr. Gray, I simply say that my information was that in some cases that was true.

A. It is not true of any of the roads that are shown in these statements.

Mr. HOW: You mean that the statement of the Master is true as to every road shown in those statements?

WITNESS: Yes.

Q. In furnishing the statement we have asked for of information as to these various corporations on this Exhibit AA, we would like you also to state, as to each one of them, or so that we can determine as to each one, what ones are operated by the Northern Pacific as part and parcel of the system without an independent organization, and what ones separate accounts of their business are kept of, if any, and on which ones there have been payments of dividends upon the stock of the purchased

corporation from time to time, or interest upon the bonds of the purchased corporation. I suppose that can all be done in one answer.

Mr. HOW: I suggest that he can probably testify to that without making a statement.

Mr. DURMENT: I don't care whether he puts it in a statement or not.

Mr. HOW: I think he can answer that, off-hand. Can't you, Mr. Gray?

WITNESS: If you are speaking of the roads, I can say that the only companies from which we receive dividends—

Q. That is, shown on Exhibit AA?

A. In fact, there is only one company that pays dividends, the St. Paul Union Depot Company.

Q. As to the roads or companies in this Exhibit AA named just preceding the entry "Total built by outside companies" what if any of those properties maintain an organization separate from the organization of the Northern Pacific Railroad Company?

A. None of them.

Q. Of which of them, if any, are separate accounts of earnings and expenses kept, by the companies themselves or the Northern Pacific?

A. None of them.

Q. In which of them have dividends upon stock been declared from time to time since the reorganization of 1896?

A. None of them.

Q. On the bonds of which of these companies has interest been paid from time to time?

A. None of them, since September, 1896.

Q. My recollection is that you testified that one of these, the Central Washington Railroad, for instance, was operated under a lease and interest was paid on the bonds.

A. I wish to withdraw and say that on the Central Wash-

ington Railroad, a part of the bonds of which are in the hands of the public, interest has been regularly paid since the creation of the mortgage.

Mr. How: Paid by the Northern Pacific?

WITNESS: Paid by the Northern Pacific Railroad.

Q. Has the Northern Pacific, on its books, carried an account in which it entered for any purpose interest upon the bonds owned by it in this road?

A. No.

Q. Neither as a credit nor as a charge, nor for any purpose?

A. It shows the amount to the public as a rental.

Q. That is all?

A. And ignores the amount that it would pay to itself.

Q. Now, I notice that in this list of particular roads that I called your attention to, there are seven of them where it says "Bonds are in the hands of the public." Has any interest been paid on those bonds since September, 1896?

A. No.

Q. On none of them?

The MASTER: Not on bonds in the hands of the public?

WITNESS: I may say that these bonds are not in the hands of the public now.

Q. But they were in September, 1896?

Mr. How: Prior to then.

WITNESS: Prior to then.

Q. What became of them September 1, 1896?

A. Well, that is a matter of the details of the reorganization.

Mr. How: They were taken up by the reorganization, were they not?

WITNESS: Yes. If you wish to go through them in detail perhaps I could tell you.

Q. Well, Mr. Gray, all I want is to get, definitely and specifically, the proposition as to what became of them.

A. If I understand what you have asked for, it will show where those stocks are now. For instance, that those stocks are in the hands of the Mercantile Trust Company or the Farmers' Loan & Trust Company, some of them. If I recollect right what you are asking me for, I will show where these bonds and stocks are.

Q. Well, all right then.

Recess until 2 P. M.

AFTERNOON SESSION.

Q. This list of seven companies which follows this footing of total branch lines,—only in one of those companies did the Northern Pacific at that time own all the capital stock?

A. That is all.

Q. In the others it owned portions of the capital stock?

A. Yes.

Q. Is it not true that after the reorganization of 1896 all those seven companies continued under separate and independent managements?

A. Yes.

Q. With separate and independent officers?

A. Yes.

Q. And as to those companies, they have paid interest upon their bonds and dividends on their stock, have they not?

A. They have not all paid dividends. The Minnesota Transfer Railway Company pays no dividend.

Q. Has it never paid any since 1896?

A. I think it was never expected to pay any.

Q. The others were expected to, and I suppose have, sometimes, at least, paid dividends?

A. Well, the Northern Pacific Terminal Company of Oregon—it is a peculiar arrangement, the stock has not been issued to the owners until such time as a bond shall have been provided for by a sinking fund, so that it is not a dividend-payer, either.

Q. These earnings are accumulated for the purpose of paying bonds and not distributed in dividends?

A. Yes.

Q. Take the list of companies under the head of Constructed Roads Acquired by Northern Pacific Railway Company, on this Exhibit AA, have they at any time, within the last ten years, say, paid dividends upon their stocks?

A. Not since they were acquired by the Northern Pacific Railway Company.

Q. They have paid interest on their bonds, I suppose?

A. The Minnesota & International Railway Company pays interest on its bonds, and has paid some dividends. The Washington & Columbia River Railway, during that period, has paid interest on its bonds but has paid no dividends.

Q. What are these companies under this heading Constructed Roads Acquired by Northern Pacific Railway Company maintain, or have, in the last ten years, maintained organizations separate and distinct from the Northern Pacific organization?

A. Well, the St. Paul & Duluth Railroad was not acquired until 1900, (which was less than 10 years ago) and since that time it has maintained no operating organization. That is, it still elects a board of directors or managers, whichever they call them, every year.

Q. And the usual corporate officers, I suppose, president and secretary, and that sort of thing?

A. Yes, whatever is necessary to maintain the organization; but as an operating property it is part of the Northern Pacific system and is not kept separate in any way. The Minnesota & International Railway is operated as an entirely distinct and separate corporation, having its own board and officers, and of that company the amount shown here represents only a seventy per cent interest.

Q. Do none of the others maintain their separate organizations?

A. Not now.

Q. Have these roads under this heading Constructed Roads Acquired by Northern Pacific Railway Company, on Exhibit AA, or any of them, since they were acquired, (that is, their stocks or bonds or whatever title or right the Northern Pacific Railway Company acquired in them) kept separate books or accounts of their incomes and disbursements?

A. The Minnesota & International Railway Company has, and the Washington & Columbia River Railway Company did, up to a year ago July 1st,—in fact its acquisition is of that date. The Seattle & International Railway Company kept separate accounts for a few years after it was first acquired but for many years it has not. The Montana Union property within ten years, has kept separate accounts but not for six or eight years. Of course, the St. Paul & Duluth Railroad Company, prior to 1900, kept separate accounts. I don't recall just when the Washburn, Bayfield & Iron River kept separate accounts, but it has never kept separate accounts since its acquisition by the Northern Pacific Railway Company. The only one in the whole list that is now keeping separate accounts is the Minnesota & International.

Q. Does the Northern Pacific Railway Company, or did it, on the 30th of April, 1908, and prior to that time, keep upon its books any separate accounts showing earnings or receipts on account of any of these roads mentioned here under the head Constructed Roads Acquired by Northern Pacific Railway Company, or disbursements made on account of the operation of it?

A. It did not.

Q. You spoke of one road here under this heading of Constructed Roads Acquired by Northern Pacific Railway Company that no dividend would be paid upon until the bonds were

paid, I have forgotten the name of it.

A. The Northern Pacific Terminal Company, of Oregon.

Q. That was under the other heading, then?

A. Yes.

Q. The sinking fund which was to pay those bonds is accumulated from what source?

A. It is from monthly charges made against the tenant companies.

Q. Oh, yes.

A. That is the terminal at Portland, Oregon.

Q. And that is one in which the Northern Pacific Railway Company owns only a part of the stock?

A. Forty per cent.

Q. Forty per cent?

A. And the stock has not yet been issued and will not be issued until the sinking fund is completed.

Q. The other companies entitled to share in that stock are railroad companies, I suppose?

A. Yes.

Q. And each of the companies interested pays a rental for the use of the property?

A. Yes.

Q. The Northern Pacific pays a rental for that also?

A. Oh, yes.

Q. On your Exhibit 13 I find an item $4,311,179.94 treasury securities included in mileage; what was that item?

A. It is shown in the bottom note there.

Q. That is the same company you have spoken of before where this road owns a certain part of the bonds and all the stock of the company and operates the road under a lease?

A. Yes.

Q. This $4,311,179.94 represents what as we understand it you claim the railroad company paid for those stocks and bonds?

A. Yes.

Q. And the information as to how much of it was in money and how much was in bonds will be furnished, I suppose, with the information I have asked with reference to the other matters?

A. Yes.

Q. I notice here the Clearwater Short Line, $2,127,200.

A. That represents an expenditure in cash.

Q. For what?

A. For the building of that part of our system known as the Clearwater Short Line, for which stock was issued, dollar for dollar, with the cash expenditure.

Q. That is to say, it is a separate and distinct corporate organization?

A. Well, it is not, in the sense of operating.

Q. No, but so far as its organization is concerned?

A. As far as its organization is concerned.

Q. And it was built by the Northern Pacific, paid for by the Northern Pacific, and the Northern Pacific took back for those payments $2,127,200 worth of its capital stock?

A. Yes, at par.

Q. And it paid that much in cash for it?

A. Yes, sir; that is the cash cost of the construction of the line.

Q. There were no bonds issued on that line?

A. No.

Q. Is that included in the properties shown on this Ex. AA?

A. It is not.

Q. "Lake Superior T. & T. Ry. additional, $56,000;" what is that?

A That is an additional amount of cash that we had to advance in connection with some improvements made by that company. It is a transfer company at the head of the lakes. The Lake Superior Terminal & Transfer Railway it is called.

Q. What did you get in return for that?

A. Stock.

Q. Dollar for dollar?

A. Yes.

Q. That is capital stock of that corporation?

A. Yes.

Q. Does that corporation appear in Ex. AA?

A. It does not.

Q. Is that all the stock of that corporation, that is, of the Lake Superior T. & T. Ry. Company?

A. As I think I explained at the time, some of that stock had been acquired by the old company, and the amount shown on Ex. 13 as additional was stock acquired since, which was handled differently by the two companies.

Q. Then that Ex. AA, on the list of property acquired by the Northern Pacific Railway Company, included some stock of the Lake Superior T. & T. Railway Company, did it?

A. Yes, $15,700. We have since acquired an additional amount of $56,100.

Q. And that does not appear upon Ex. AA?

A. It does not.

Q. No part of the stock of this Clearwater Short Line, shown on your Ex. 13, appears upon any part of Ex. AA?

A. No part of it.

Q. Does the Northern Pacific Railway Company own all the stock of the Clearwater Short Line?

A. It does.

Q. Are there any bonds on that road?

A. None.

Q. Does it own all the stock on the Lake Superior T. & T. Railway Company?

A. No, only a portion of it.

Q. Where is the rest?

A. The Omaha road owns some, I think, and the Great

Northern.

Q. Now with reference to that,—does that company pay dividends?

A. I think it does. We have a third interest in the lines in Superior.

Q. And your Company pays a rental, I suppose, for the use of it, also?

A. Yes.

Q. The Clearwater Short Line,—is there any separate organization of that company kept up?

A. There is not.

Q. Was there, on April 30, 1908, or prior, any separate account kept, either by it or the Northern Pacific Railway Company, of any of its operations, or the moneys earned, or the disposition of them?

A. No, it never was anything but a construction account.

Q. This St. Paul Union Depot Company, $53,600, on Ex. 13, what does that mean?

A. The old company had $50,000 of that stock, and we have acquired since, $53,600 more.

Q. This $53,600 does not appear upon Ex. AA?

A. It does not.

Q. That makes $103,600, par value, shares owned by the Northern Pacific in the St. Paul Union Depot Company?

A. Yes.

Q. Dividends are paid on that?

A. Yes.

Q. And the Company pays a rental to the Union Depot Company for its use?

A. Yes.

Q. This item under the head of Equipment and Discount and Commission, $939,858.42, what does that represent or mean?

A. The same as discount and commission on the construc-

tion statement; it would represent discount on bonds sold for less than par to purchase equipment.

Q. That is to say, the actual cash invested in equipment was $939,858.42 less than the face or par value of the securities upon which the money was raised?

A. Yes.

Q. With reference to this Ex. 13, I understood that these figures represented the book value of the cost of construction and equipment as shown by your books.

A. Yes.

Q. Does that take into account any depreciation, has anything been charged off for depreciation in arriving at these figures?

A. We charged off against equipment in the year ending June 30, 1906, $2,000,000, and in the year ending June 30, 1907, $5,926,753; a total of $7,926,753.

Q. And these values of $369,252,755.73, given as the grand total on this Ex. 13, is the grand total after deducting those charges for depreciation?

A. Yes. I think I ought to explain (I thought I had made it clear before) that there are no such figures as these on any books of account that the Company keeps; that these figures are made up from reports made from year to year to the Interstate Commerce Commission and to various railroad commissions; that, with the exception of the first item, of $65,000,000, (which has been so often explained) the rest represents what we regard as cost of construction and acquisition of railroad property.

Q. And is all shown upon the reports made to the State?

A. It can all be checked into those reports, and I hope, before the case is through, to submit a statement of differences between this exhibit of mine and the exhibit prepared by Mr. Hillman the accountant of the Commission.

Mr. How: I hope that you will, too, because I have asked

that that statement be prepared.

Q. Perhaps my question is misleading, but in making up this statement which you have made up, or in arriving at this figure $369,252,755.73, you have included in your total there the seven millions of dollars and over of depreciation? In other words, if you did not, in making up this statement, give credit for that depreciation, your total would be more than seven millions of dollars greater; is that right?

A. Yes. In order that there may be no mistake, I would explain that the equipment account, which is shown here as a separate item, is greater than the amounts standing as equipment on the books of the Company as of this date or any date since 1896, for the reason that, in addition to the depreciation that I have explained, at the time of the reorganization, when the books of the new Company were opened, the equipment was taken over not at its cost but on a valuation, so that the figures shown here as the cost of the equipment is greater than the book account of equipment at the present time.

Q. Well, before I touch that, Mr. O'Brien suggested that your testimony, yesterday or before, as he understood it, was to the effect that at the beginning, or in September, 1896, you assume the cost of construction and equipment of the Northern Pacific Railway Company at a figure of about three hundred and seven millions, it appearing that way in the reports of the old Company, and that your figures for which you were responsible, were made up from that time only; is that right?

A. No, that is not right. In starting the books of the new Company, no attention whatever was paid to the books of the old Company or what they showed. We set up as a liability of the new Company all the bonds which it assumed, the bonds which it had issued as of the date of September 1, 1896, and the total capital stock of 155 millions. The amount so set up as a liability was the amount that represented the Northern Pacific estate as of that date; that amount was segregated so

as to show certain items of personal property separately; the equipment, for instance, was drawn down at this valuation of which I speak; the stock and material and supplies were set up as a separate account; the deferred payments on land contracts were set up as a separate account; the cash was set up separately; the treasury securities that were on hand were set up separately; any accounts receivable that there were were set up separately; and so on. But it was in that way that the accounts of the new Company were started with reference to the obligations of the Company and not with reference to any accounts or any state of facts that existed in the books of the old Company whatever.

Q. I suppose, then, if I may speak of it in that way, you started out the new Company by making a balance-sheet, is that it? that would show the same information that a balance-sheet would show at the end of a year?

A. It would make a balance-sheet, of course, show entries as I have explained.

Q. Would you object to producing that entry made as showing that particular time?

Witness produces book.

Q. Then as I understand it, this account with which you opened the business of the Northern Pacific Railway Company in September, after the reorganization, to which you referred in an answer just given, is found on pages 21 and 22 of—

A. Journal No. 1, Northern Pacific Railway Company.

Q. And on page 23 is the segregation or valuation of the equipment account?

A. Yes.

Q. And on following pages a similar segregation of the values of other portions of the estate?

A. Yes.

Mr. DURMENT: We offer, at this time, in connection with the examination of the witness, these pages 21 and 22, and will

have copies made if they will permit us to.

WITNESS: I shall have them made for you.

The statement to be prepared by the witness will be marked Defts' Ex. BB—Gray.

Q. I notice in your general balance sheet of June 30, 1897, which has been referred to before, that under the head of Capital Assets your first item is "Property Purchased at Foreclosure, $293,947,706.35."

A. Yes.

Q. And under the head of Equipment, "Purchased at foreclosure and valued at $12,692,180."

A. Yes.

Q. I understand that $12,692,180 is the value which was placed upon the equipment which was included in the total valuation at the foot of page 22 in Ex. BB?

A. Yes.

Q. Is it true that that valuation was arrived at by having it examined and appraised?

A. No.

Q. How was that valuation for the equipment arrived at?

A. I am not able to say with exactness, but I think it was done by the "rule of thumb"; but perhaps the best thing to say is that I don't know.

Q. Was this value of $293,947,706.35 which is placed in the general balance-sheet of June 30, 1897, as property purchased at foreclosure, arrived at by a valuation of the property and an appraisal of it?

A. It was not.

Q. In what way was that arrived at?

A. It was arrived at in the way that I have explained and as shown by the entries which you have been looking at in the journal.

Q. If I understand that correctly it was this, then: They first found the total amount of liabilities—

A. Yes.

Q. —including capital stock which they were to issue—

A. Yes.

Q. —then they assumed, arbitrarily, a valuation for the properties which they had acquired or had, equal to the liabilities—

A. Yes.

Q. —and the account started out upon the reorganization when the Northern Pacific Railway Company took hold of it in that way upon that basis?

A. That is right.

Q. In preparing your Exs. 13 and 15 you prepared them upon the theory or assumption that the values to be carried into them as of the date when the Northern Pacific Railway Company took possession in September 1896 should be $293,947,706.35 for the property purchased at foreclosure, exclusive of the equipment, and $12,692,180 for equipment?

A. No, there is no relation between the two statements, nor was there any in mind. Statement No. 13, as I have said, starts out with the 65 millions of valuation, somewhat corresponding to the amount shown as Northern Pacific Estate now under the new reorganization, and to that has been added, from year to year, the amounts expended by the two companies for construction and equipment, and it has been built up in that way, and there is no mathematical relation between it and the balance-sheet that you have before you or the Northern Pacific Estate as it appears in the books of the present Railway Company.

Q. Defts' Ex. 13 shows the book-value of all the property, of every sort and description, owned by the Northern Pacific Railway Company on April 30, 1908?

A. It shows no book-values at all; it is a built-up statement of cost, on account of expenditures from year to year, as I have tried to describe it.

Q. Does it show, or is it intended to show, the cost up to April 30, 1908, of all the property, of every kind or description, owned by the Northern Pacific Railway Company on April 30, 1908?

Mr. How: You mean all the property used in operating?

Mr. DURMENT: No, I mean all the property, of every kind.

A. It does not show, for instance, the stock of material and supplies; it does not show any cash; it does not show any accounts receivable.

Q. Well, is it not true that the Railway Company owns a very considerable amount of stock in other companies and other corporations, and bonds and other property, that is not included (the cost of it) in this statement Ex. 13?

A. Where the railroad is represented by those stocks and bonds as included in the Northern Pacific system or represents the road that we are operating to-day, it is included there; but where the stocks and bonds are simply what might be called investments, or stocks and bonds that we hold as treasury securities, they are not included there.

Q. Was there at the time the Northern Pacific Railway Company took over this reorganized property, or at any time thereafter, entered in its books a detailed statement of the properties or assets acquired under that foreclosure?

A. I don't think so except as those various entries show. For instance, the items that have been segregated from the estate, but those two pages that you have read cover the general description.

Q. Do the books of the Northern Pacific Railway Company contain any account or entry showing what was bid for the properties at the foreclosure sale?

A. They do not.

Q. Do the books of the present Railway Company show what was bid at the various sales of the lands covered by the land-grant when they purchased at the foreclosure sale?

A. They do not. When I answer that, I mean that the books of account in my custody do not show that.

Q. The report of the reorganization managers of the Northern Pacific Railroad Company made to the board of directors of the Northern Pacific Railway Company, in April, 1897, showing the details of the reorganization, which has been shown you and marked "Exhibit W," on pages 8, 9, 10 and 11, shows, as I understand it, a partial list of securities acquired by the Northern Pacific Railway Company on this foreclosure sale?

A. Yes.

Q. It is true, is it not, that this total valuation of assets with which you opened the account in September, 1896, being something like 315 millions, shown in Exhibit BB, included the value not only of the operating properties and the land-grant, but also of all stocks, bonds and securities acquired at that foreclosure sale?

A. Yes.

Q. Property of every kind acquired at that sale?

A. Yes.

Q. As I understand your testimony, your books of account do not at this time contain any account showing what stocks and bonds and securities which are referred to under the head here on page 8 of the reorganization managers' report as securities acquired by foreclosure of the Northern Pacific Railroad Company mortgages, were in fact acquired, nor what disposition has been made of them?

A. The books of account showed anything that was held as treasury securities, but the various stocks and bonds that were used as muniments of title and put up with the trustees of the mortgages, were not shown in separate accounts on the books.

Q. Could you, from your books of account, tell what of those stocks and bonds or securities acquired upon this foreclosure sale in 1896 are up with the trust companies as muniments of title and with what companies?

A. I could not tell from the books, but I can tell from other sources. I expect to furnish you with a statement.

Q. You say you expect to furnish us with a statement?

A. Well, you asked, this morning, in regard to that, as I understand it; at any rate, with regard to those particular items.

Q. In this partial list of securities so acquired, I notice an item "$2,210 Northern Pacific R. R. Co. preferred stock." Do you know whether that was exchanged, upon the reorganization, for other stock?

A. I don't know.

Q. I find on page 8 of this reorganization managers' report, securities received have been disposed of as follows: "First, delivered to the Mercantile Trust Company of New York, as trustee under prior lien mortgage of Northern Pacific Railway Company, dated November 10, 1896," and then follows a long list of bonds and stocks. I suppose your books of account will show what bonds and stocks in this list—and, if there are others, the others—which were delivered and are held by the trust company as trustee under that mortgage, will they not?

A. The books of account do not show that, but I have other records from which I can make a list.

Q. You will make us up a list of it, will you?

A. If you desire it, yes.

Q. Please do so. Now some of these stocks, apparently, were dividend-paying stock. For instance, I find here in this list "Northern Pacific Express Company, $343,000." The dividends on that, are they paid to the Northern Pacific Railway Company?

A. Yes.

Q. Then, as I understand it, all the dividends which are paid upon any of these stocks, and all the interest paid upon any of these bonds, which are in the hands of the Mercantile Trust Company, are paid to the Northern Pacific Railway Company?

A. Yes.

Q. And they are yet the property of the Northern Pacific Railway Company, but held, under the terms of that prior lien mortgage, by the trust company?

A. Yes.

Q. A few minutes ago you spoke of stocks and bonds which were held as a treasury asset or security—

A. Yes.

Q. —that is, as in the nature of an investment.

A. Yes.

Q. Is there a separate account or list of such securities kept on the books?

A. They are shown in the balance-sheet every year.

Q. Will you let us see the balance-sheet for the 30th of April, 1908?

A. That is not the end of the year.

Q. They would be shown in the balance-sheet at the end of every month, would they not?

A. Yes.

Q. Your Exhibits 13 and 15, under date of April 30, 1908, which is the end of the month,—we would like to see that balance-sheet, please.

Witness produces sheet.

Q. Do you object to my examining the other portions of this balance-sheet at this time? I had purposed calling for and putting in evidence the balance-sheet of that date, and I will do it without looking at it if you say so.

A. There is the balance-sheet of that date.

Q. I have asked you to produce your balance-sheet for April 30th, 1908, and I have here before me pages 12 and 13, headed "Condensed sheet from general books, April 30, 1908." This book is "Northern Pacific Railway Company, Statement of Accounts for Month of April, 1908," and has about 30 or 31 pages in it. Are the pages which precede and follow these pages 12

and 13 the details or explanation of the entries upon pages 12 and 13?

A. Almost entirely so.

Q. And upon the following page which you show me, page 14, is a list of the treasury securities?

A. Yes.

Q. On page 15 of this book is a statement of "sundry assets," also, which are carried into the general balance-sheet on pages 12 and 13?

A. Yes.

Mr. DURMENT: We will offer in evidence, as part of this cross-examination, these four pages, 12, 13, 14 and 15, as one exhibit, which will be marked "Defendants' Exhibit CC—Gray."

Q. As to these "treasury securities" mentioned in Exhibit CC, I notice here capital stock of the Northwestern Improvement Company. Does the Northern Pacific Railway Company, upon its books of account, keep a record of the properties of the Northwestern Improvement Company and their values?

A. No.

Q. Are the records which are kept showing the assets and liabilities and property of the Northwestern Improvement Company in your custody or control?

A. They are not.

Q. Take these other corporations named here on page 14 of Exhibit CC, in which it appears that the Northern Pacific Railway Company owns the stock in them, does the Northern Pacific Railway Company keep books of account showing the values of the property of those corporations, or any of them, and their assets?

A. The Clearwater Short Line Railway I have already explained full and the Lake Superior Terminal Transfer Railway and the St. Paul Union Depot Company. The Missouri River Railway Company is a company that has just been started; it has been projected and $10,000 of capital stock has been

issued but I do not think any amount of money has been expended yet in construction.

Mr. How: That is the one that is designed to operate north and south from Mandan?

WITNESS: Yes. And the Western Dakota Railway is in the same condition.

Q. These general lien bonds and prior lien bonds are bonds which have never been issued?

A. They may have been. They were purchased as an investment.

Q. That is, the Company has had money on hand and has bought them rather than to retire them?

A. Yes.

Q. What is meant by the "N. P. and G. N. joint bonds"?

A. Those are the bonds which were issued jointly by the Northern Pacific and Great Northern to pay for the capital stock of the Burlington road.

Q. That is the same as the others—the Company, instead of retiring those bonds bought them and hold them as an investment?

A. Yes.

Q. How about the St. Paul & Duluth division bonds?

A. The same thing is true of them.

Q. Now, turn to your Exhibit 14. When, and for what, were the St. Paul & Duluth mortgage bonds issued, which are referred to there under the subhead "C"?

A. They were issued to provide the funds wherewith to pay for the stock of the St. Paul & Duluth Railroad. That has already been explained in the record.

Q. On your Exhibit 16 there is an item of interest on the funds in the hands of trustees; what fund do you mean by that?

A. The funds that are explained on page 15 of the balance-sheet for which you have called.

Q. On page 15 of Exhibit CC?

A. Of Exhibit CC.

Q. On page 767 of your testimony you state that there was realized from consolidated mortgages, in 1889, $42,136,751.62, but that sum includes more than cash. I would like, if you can, that you would give us the amount of cash which was realized upon those.

A. I have given them there.

Q. Then in the next question answered by you you say that the cash sales from January 31, 1890, to July 1st, 1893, realized $19,019,175.75. That is the amount of cash that was included in the $42,136,751.62?

A. Yes.

Mr. DURMENT: We offer in evidence Defendants' Exhibit U—Gray, as a part of this cross-examination.

Q. We asked you to make a statement, giving, in a little different form, the information contained in Exhibit T—Darling, and you have done so. This statement which is marked "Defendants Exhibit T—Gray" is the statement which you have furnished?

A. That is the statement.

Mr. DURMENT: In connection with Exhibit T—Darling we offer in evidence the statement Exhibit T—Gray.

Mr. O'BRIEN: There are two statements, Exhibit V and Exhibit Z which were sent up to the capitol building for correction. I suggest that, as we cannot get them down this afternoon, I send them down to Mr. Gray tomorrow, receive his O. K. upon them and then present them to the Reporter and have them received in evidence as exhibits, and the ones for which they are substituted destroyed.

This suggestion was concurred in.

Q. You were asked to furnish a statement of something like 18 or 21 millions of dollars which, prior to 1907, had been charged to income account which you in the year 1907 transferred to capital account; you have produced what has been

marked as Exhibit EE—Gray; is that such statement?

A. Yes.

Mr. DURMENT: We offer Defendants' Exhibit EE—Gray in evidence as a part of Mr. Gray's cross-examination.

The further taking of testimony in this case by agreement was here adjourned until Monday morning, August 17, 1908, at the Federal building, with the understanding that the Minneapolis & St. Louis case will be taken up on Monday morning next, at the same place. (Adjourned.)

FEDERAL BUILDING, St. Paul, Minn., Tuesday, September 15, 1908.

This case having been continued from time to time until this day, the hearing was resumed at 10 o'clock A. M.

JOHN B. BERRY,
sworn as a witness on behalf of Complainant, testified:

By Mr. How:

Q. Mr. Berry, will you state your name, your residence, and your present occupation?

A. John B. Berry; residence, Oak Park, Illinois; occupation, Chief Engineer of the Rock Island Lines.

Q. Will you state, in detail, what your education and experience as a railway engineer have been?

A. Educated at Brooklyn.

Q. In what school?

A. In the Brooklyn Polytechnic.

Q. When did you graduate?

A. 1878. Began work with the Northwestern road; served fifteen years with them in various capacities in the engineering department; then five years as chief engineer of their Elkhorn lines west of the Missouri river; then eight years as chief

engineer of the Union Pacific; six years of that time in charge of the engineering of the Oregon Short Line, and part of the time in consultation as an engineer on the Oregon Railroad & Navigation Company; three years as chief engineer of the Rock Island lines.

Q. What, in general, are the functions of a chief engineer of a railroad system, what are his duties?

A. He has charge of all surveys, new construction, changes of existing railroad, preparation of estimates and contracts, supervision of the same, and general direction of various matters in connection with maintenance of way.

Q. In case of new construction from one point to another, what is the engineer of a railway company called upon first to do?

A. He has the line looked over first or the various lines.

Q. The various lines which might be taken between those two points?

A. To run between the two points; followed, usually, by a preliminary survey, to determine the value and merits of the various lines; then followed by a location on the most desirable one. If authorized, contracts are made and the line built.

Q. As between two or several routes that might be followed between two points, what determines the question as to desirability of one over another?

A. From an engineering standpoint, the greatest revenue from the amount of money spent to the best advantage, looking, sometimes, to the future to produce a revenue. Locations are sometimes decided, however, aside from engineering questions, such as desirability to reach existing towns, and, in some cases, the efforts of the people who are hustlers to divert the line through their town.

Q. How is the cost of various proposed lines (or routes, at least,) as compared with each other, made known to the promoters of the enterprise?

A. The estimates of cost of construction are gotten up in detail.

Q. By whom?

A. By the chief engineer and his staff. Then the economics of it come into play as to the saving, due to rise and fall, lower rates of grade, saving in distance and saving in curvature. The economics applied to each of the various lines determine the money value of each one.

Q. How does the engineer make this estimate of cost of a route which he presents to the promoters?

A. He gets all the quantities and costs to build the road from his surveys, and examines into the difficulties or peculiar features of construction due to that line; the sum represents the cost to build the line.

Q. Are you now familiar with the present cost of railway construction in all its branches?

A. Yes, sir, in the territory that I do work or have done.

Q. And you acquire that familiarity (probably it is unnecessary to repeat) through the fact that you are called upon to make these contracts and to make these estimates and to make reports upon cost?

A. Yes, sir.

Q. Have you made an estimate of the present cost of construction of the Northern Pacific System?

A. Yes, sir, as of date June 30, 1906, and it remained about in the same condition during the whole of that year.

Q. Why did you take the date of June 30, 1906, for the purpose of making your estimate?

A. In the Spokane rate case I was called in to estimate, from the records of the Northern Pacific office, what it would cost to reproduce it. That examination and estimate was finished March 17, 1907. The data to make it was of date June 30, 1906, the time of the annual report, and at a time when all departments have their data tabulated. I then testified before

the Interstate Commerce Commission, in Chicago, about this matter. To enable me to get a fair comparison between the estimates made from the office data and the new estimate which I have just finished, and bearing in mind that the road at that time was not doing any extensive work, I could more readily make the estimate as of that date than I could with the very large work now going on on the Northern Pacific road.

Q. You have been over a large part of the System of the Northern Pacific, have you not, for the purpose of making this estimate?

A. Yes, sir.

Q. Did you find it possible to tell, without difficulty, how the road existed on the 30th of June, 1906, and what work has been prosecuted since that time?

A. I was able to determine very closely the condition of the road in 1906, but could only judge of the new work from appearances and as it was being prosecuted.

Q. What did you have before you in making your estimate for the Spokane rate case, what information did you have with regard to quantities, etc.?

A. It was almost wholly data collected—it was wholly data collected—from the chief engineer's office of the Northern Pacific, also from Mr. Cooper, the real estate agent and land commissioner, the superintendent of telegraph, the superintendent of motive power and machinery, taking the data from the chief engineer's office and making it fit the present conditions, securing new quantities and applying the unit prices which I thought were fair to do the work at that time.

Q. But without, at that time or prior to that time, any critical examination of the property itself, as I understand it?

A. I had not made any.

Q. Now will you not state, in detail, the method which you employed in making your present estimates, starting with

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the very beginning, if you please?

A. After consultation with Mr. How, it was decided that I should go over at least a portion of the Northern Pacific road, to verify and justify the previous estimate, or to make such an estimate as I thought was fair, to reproduce the road at that time. I then had an assistant of mine prepare the statement of which this is a copy. (Witness produces statement which was marked Complainant's Ex. 24—Berry). I wanted to get something put together that made up a railroad between stations by miles, meeting the various conditions of construction as to height of cuts or fills, widths of roadbed and classified material, so that as we rode over each mile of the railroad we would take one of these classes, or a combination of them, and identify that classification later with the cost per mile of that class. Each class is represented, from "A" to "L," as a single-track railroad, and from "M" to "T," inclusive, as a double-track railroad. A combination of several letters would indicate an equal proportion of each one. I would like to illustrate just one case: Take class "F" for a single-track railroad. First of all, we determined, outside of big terminals, the proportion of sidetracks and spurs to each mile of main line or branch line. In this case we are treating with a main-line proposition. Three-tenths of a mile of siding per mile of road; for an embankment 17 feet wide at top; for an earth excavation, slope of 1½ to 1, 24 feet; an excavation of loose rock, slope 1½ to 1, 24 feet; excavation of solid rock with a slope of ½ to 1, 18 feet. Now, on the assumption that this mile—that there was a continuous fill of eight feet for two-thirds of a mile and an excavation for one-third of a mile, and it was all earth, it would make 37,916 yards, which, multiplied by the unit price per yard, would give the cost of the grading. We also found that this cost of grading would fit several other conditions; for instance, it would fit an embankment six feet high over the whole mile; it would fit a

condition in which it was all excavation of 4.9 feet high; it would fit an excavation of 2.6 feet high in which one-third was earth, one-third loose rock and one-third solid rock; it would fit a condition of a cut 2.8 feet deep over the whole section, of half earth, a quarter loose rock and a quarter solid rock; it would also make a cut of 2.1 feet over the whole mile if it was all solid rock; 2.9 feet deep over the whole mile if it was all loose rock. So that while these classes are represented by letters, we could make a combination of half a dozen types of construction in each class. We took the track-ties per mile of railroad, the tie-plates per mile of railroad, the switch-ties and switches per mile of railroad, and the rail per mile of railroad, including the side tracks, adopted Northern Pacific custom, and worked out the number and tonnage of per mile of road. That put us in a position so that as we went over the railroad and saw each mile we moved the checker around this board to fit that condition or combination of conditions.

Q. This work, as I understand it, was done preliminarily to your trip over the road?

A. Yes, sir.

Q. How long did it take to do that work?

A. It took my assistant a little over two weeks, and myself at times working with him, to make this statement.

Q. You worked with him at such times as you could afford, apart from your other duties?

A. Or as he needed my assistance.

Q. And in the evening, I suppose?

A. Well, we did talk about it in the evening, but he did most of his work in the daytime.

Q. And this classification of the various types of road was completed before you started to inspect the System?

A. Yes, sir; in fact, it was used continuously over all of the Northern Pacific that we traveled by daylight and examined. As I stated, he moved this checker over this state-

ment, and each mile is recorded with the class or classes, whether there was ballast, whether there was a single track or double-track, whether there were fences, and if there was ballast, what kind. That could be done readily, although it occupied all his time. These were entered in that way.

Q. In note-books kept at the time?

A. In addition to that I was keeping track of this classification, being reasonably free, but compiled two books myself of the various things that I wanted to determine later or as a check on his classification.

Q. Now, with this preparation preliminarily, you started to inspect the Northern Pacific System?

A. Yes, sir, but I would like to go just a little bit further.

Q. Yes, don't let me interrupt you.

A. Having adopted this as a basis and the values per mile, we then determined what it would cost, in dollars and cents, to build a mile of road between stations, under the head of grading, bridges, ties, rails, track-fastenings, frogs and switches, track-laying and surfacing, fencing, right-of-way, crossings, gates and signs, interlocking and signal apparatus, station buildings and fixtures, shops, round-houses and turntables, water stations, grain elevators and warehouses and miscellaneous structures. That gave us, in dollars and cents, what each class would cost of the various items that made up that mile.

Q. Now, after that preliminary work, you started on an inspection of the Northern Pacific System?

A. Yes, sir.

Q. Will you state just what parts of that System you covered?

A. The map as colored in red shows the portion covered by daylight.

Q. Will you not describe it so we needn't have the map in evidence?

A. Yes, sir. Starting at Duluth, went direct to Seattle via Helena; from Seattle north, to Sumas, taking in the Darrington branch and the Bellingham branch; south of Seattle, to Portland, taking in the lines to Moclips, to South Bend, and a cross-line from Gate to Centralia; the line between Spokane and Lewiston; the line between Missoula and Wallace, over the mountains, between Garrison and Logan via Butte; Jamestown via Oakes to Wadena; Staples to Minneapolis; St. Paul to Duluth by the direct line, and out by the way of Superior and Carlton; the branch to Stillwater; the branch from White Bear to Minneapolis Junction; and the old main-line back into Minneapolis; a distance of 3,396 miles.

Q. Did you cover all of that in the daytime?

A. Yes, sir.

Q. And you inspected each mile separately, as I understand it?

A. Yes, sir.

Q. Of that 3,396 miles?

A. Yes, sir.

Q. Now, I have before me one of your note-books used upon that trip, and I open it at random and find "Billings to Glendive, mile 226." What does 226 mean?

A. It means that we began, that morning, August 27, 1908, or that time in the day, at mile-post 226, which was near Billings, and we followed, in successive order, down through Glendive, to a point about 17 miles east of it between 10 o'clock that morning and 6 that night. That is what that means. And that means the classification for mile 226 is "E F"

Q. I see, under Class, "E F." What does that mean?

A. It means that we take the value of class "E" and the value of class "F", and one-half of each as the value of that mile.

Q. And I find the heading "Bal", which I take to indicate

"ballast", the letter "G". What does that mean?

A. The letter "G" means just gravel, and the check-mark means that the mile is ballasted.

Q. What does "ST" mean, the heading?

A. That is single-track.

Q. And the check-mark means that it is single-track?

A. Yes, sir.

Q. I find under the heading Fencing the word "No".

A. That means that there were no fences on that mile, or, if any, but very little.

Q. The book contains miles decreasing as indicated. I suppose the indication of the mile is merely the number of the mile?

A. It is the number of the mile-post.

Q. Yes, to Glendive. I find under the heading Glendive "Large ice-house, capac," (indicating capacity, I take it,) "filter system," and, opposite, the figures "40,000." What does that mean? I would like to have you tell what that whole page means. What I am trying to do is to show what your system was and how you kept your notes, and I am taking that merely to have you do it in that way, but I think perhaps you can tell what your system was when you got to a terminal.

A. As I defined this statement as "the cost of each mile between stations," it was necessary, at any station that was larger than the ordinary, to find out the cost in excess of the rate per mile. In a large number of the stations (and we estimated 51 of them) we took notes on the ground, and I attached a value to such items as I could, based upon my knowledge of similar structures or upon the value per square foot of area, subject to checking up the station-ground plats in the office at St. Paul. These are the notes that we took at Glendive: "Large ice house, capacity ————" There were several of them, so that we decided to get that area and place

a value on it later. The filter system (which we examined very carefully, and the local officials told us cost $40,000), I put down with a question-mark. The yardmaster's office I gave a value of $1,000; brick lunch-room, two-story passenger station, and the brick wool-warehouses are noted, but no values placed on them. Three ice-houses, capacity 7,000 tons, $7,000; car repairers' building, no value, new coal house and chute, $12,000; brick oil house, $1,000; three water-tanks, $4,500; one foreman's office, no value; two cinder-pits, $5,000; store-keeper's supply-house with platform, no value; brick sand-house, $1,500; machine shop, no value; brick round-house, old, twenty-four stalls, $39,600; brick round-house, new, eighteen stalls, $41,400; turn-table, $6,000, brick boiler house, no value; one-story brick freight house, two-story frame carpenter shop, no value. With this information and additional that I made myself, in another book, we took the station plats and corrected it or adopted these figures if they were satisfactory.

Q. How long did you take to make this trip of inspection Mr. Berry?

A. I was gone three weeks and three days, and had to lay up two days, one Sunday and one week-day, because it was a pretty strenuous job.

Q. Now in your estimate where do these values which you placed on the Glendive property appear? Is this your estimate?

A. Yes. sir. (Witness produces statement which is marked for identification Complainant's Exhibit 25—Berry.) This estimate is the total cost to reproduce the Northern Pacific Railroad, and on sheet 6 with the heading of the sheet "Large and Important Terminals exclusive of Land and Items included in other Headings" the word "Glendive" appears, $333,494.

Q. How many stations did you examine in the same manner as you examined Glendive and include in your estimate

in the same manner?

A. 21 going all over the ground; and the other 30 taking such notes as we could while the train stopped at the station.

Q. And what other information did you get with regard to those stations?

A. Talking with the local officials as to what there was on the property, checking it up with the station grounds at St. Paul.

Q. The station-ground plats?

A. The station-ground plats in the chief engineer's office at St. Paul.

Q. Now, there are many more stations than 53 on the Northern Pacific System; how did you include in your estimate the valuation of buildings and improvements, stational improvements at other stations on the road apart from the largest terminals?

A. The statement Ex. 24 gives the cost per mile of road under the conditions which I have named. As we went through these smaller places we took note of what there was, and if it met the usual conditions under the head of Mile of Road with an allowance for ordinary station buildings, fixtures, etc., it was classed under that mile.

Q. Included within the mile that you were examining?

A. Yes, sir.

Q. And without any separate item for the station?

A. No sir; everything outside of these big stations, an estimate was made of about the necessary buildings and the cost for such a mile of track, and classified in that way.

Q. Now, as I understand it, when you completed that trip, every mile that you had examined out of the 3,396 was placed, either under some one class or some combination of two classes, in this schedule of classes which you had prepared as a preliminary to making the inspection?

A. Yes, sir.

Q. When was it so classed, at the time or afterwards?

A. Every evening the work of the day was put down according to its classification.

Q. What work was necessary in order to complete your statement after you had completed the inspection trip?

A. Notes were taken of about 275 of the important metal bridges—I had the chief engineer's blue-prints showing the location of all truss and girder bridges, which were checked as I went along—and on our return to St. Paul I had the bridge engineer of the Rock Island come to St. Paul, and with a graphical table, by which we approximately determine quantities, he made an estimate of those over 200 bridges.

Q. Under your supervision?

A. Yes sir. We tabulated those by the prices that are prevalent, and each one of these bridges are entered in detail.

Q. Each one of the large bridges?

A. Each one of the large bridges, that he checked in the bridge engineer's office at St. Paul.

Q. And what other work did you do since completing the inspection trip?

A. With the help of the chief engineer's staff at St. Paul, and our own men, we checked over all the station grounds named, 51, and my assistant attached a value to the various improvements on each one of those station grounds. In the case of the larger terminals, like Duluth, Seattle and Tacoma, and Portland,—where we spent a day, going all over it,—we made our figures on the ground, checked up the data with the station plats, but as our information was, if anything, newer, it was evidently better than the station plats, and we allowed that to stand without correction.

Q. Referring to Ex. 25—Berry, which is the estimated cost to reproduce the Northern Pacific railroad, based on its condition and mileage as of June 30, 1906, after you had acquired all this information and done all the work of checking, etc.,

how was this estimate made, how was it put together?

A. We took the number of miles of each class, without regard to where it was, and multiplied it by the price per mile of that class, which gave us an amount for each class or combination embracing 5,785 miles of main track, amounting to $140,808,320. We had blue-prints showing the tunnels and their conditions, but we checked them over and in each case saw whether it was for single or double-track, lined with timber or masonry, and the tunnels represent that investigation, with unit prices such as I have been accustomed to paying for tunnel work, amounting to $4,545,938.40. From the notes we took as we went along, and information that we secured about lines that we did not go over, we made up the ballast statement on the basis of what is good practice in ballasting, amounting to $9,659,250. The next three sheets represent the cost of each of the big bridges I have heretofore referred to, the detail shows $9,349,301; the balance of these important bridges which we estimated, we did not include in the detail, but they amount to $2,117,404. The balance of all kinds of bridges and culverts we arrived at as amounting to $8,878,229. These we arrived at as follows: In the March, 1907, estimate, we got the data from the Northern Pacific office of all bridges and culverts, checked up as well as we could with the recorded cost of the same, which amounted to $20,344,934. To justify this estimate we checked over the large bridges that I have heretofore mentioned, which amount to nearly eleven and a half million dollars, deducted that from the recorded amount stated of $20,344,934, which left $8,878,229 for the balance of all kinds of waterways. This was to verify, in so far as it was possible, the recorded cost of these bridges and culverts. Included in this last amount, which we could see from the train and a few of which we saw on the ground, are a great many important arch bridges; in fact, the cost of some of them was even great-

er than some of the metal bridges that we estimated, and we took this $8,878,229, and prorated that amount per mile of railroad, main and branch lines, and included that in the statement I have heretofore described as bridges and culverts. That prorate will be brought out more clearly in a letter of explanation of the basis of all this work, and this prorate that I speak of per mile of track for bridges for single track, including bridges or sidings, is $2,030; for double-track, including sidings, $3,248; single track, for branch lines, $1,015. On the next page, 51 stations, with the value of the improvements on the stations, exclusive of land values or the per mile of track, amounting to $22,199,759. On the following page is a statement of the value of land, first giving fifteen stations, amounting to $75,537,630.54, leaving for all the other depot grounds and right-of-way, $31,337,986.66. If I may be permitted to go to this other statement, which will appear later, it brings out that this valuation was made by the Land Commissioner. We verified it so far as we could, and while it looks like a very large amount, this is the way we analyzed it: A width of a hundred-foot right-of-way and a mile long—

Mr. O'BRIEN: Just wait a moment. We think we will enter an objection to the witness analyzing or arguing as to the correctness of the valuation made by the Land Commissioner, on the ground that that is incompetent, irrelevant and immaterial.

The MASTER: Objection noted.

Q. Proceed.

A. On a basis of 100 feet wide and a mile long, (which is the usual right-of-way) it is twelve acres of land; additional right-of-way is secured on all railroads for borrow-pits, slopes, changes of highway, and for various construction purposes. We figured that at three acres per mile, making a total of fifteen acres per mile for straight right-of-way, which we put down at $200 per acre, making $3,000 per mile. We took an

ordinary station ground which is customary at the present time and in addition to 100 feet wide we took a piece 3000 feet long and 100 feet in width, and, on still more important station grounds, we made it 3000 feet long and 200 feet extra width. Taking the number of stations on the Northern Pacific railroad, makes 96,232 acres, and which on the mile-basis makes $21,288,800, leaving $10,300,586 to buy land at all of the other large terminals, except fifteen mentioned in Mr. Cooper's statement, and in excess of 1.7 acres. In other words, of the 51 stations, fifteen of them are shown as having a land value of a little over 75 million dollars, and of the 36, some are very important towns, with which to purchase land at these stations, and at other places where needed in excess of the regular allowance, for which there was an amount of $10,300,586; which in my opinion is not excessive either in acreage or amount. This excess acreage over and above the fifteen stations is about 152,000 acres.

Q. You found the right-of-way to be 400 feet in width, did you?

A. In many places, where there was a land-grant, yes, sir.

Q. What width did you estimate the cost of grading, clearing and grubbing?

A. Well, that depends upon the width of road-bed required. Ordinarily 100 feet. Wherever necessary, additional width, depending upon the width required.

Q. You were not governed by the fact that the Company owned 400 feet wide, were you?

A. Yes; that is included in the acreage and amount given.

Q. I mean with regard to estimating your clearing, grading and grubbing.

A. Not at all, no, sir.

Q. And you did not bear in mind the fact that the Supreme Court of the United State has declared that that amount of right-of-way is necessary to the Company, at all?

A. No, sir.

Q. You perhaps did not know of that fact?

A. Well, I didn't know of it.

Q. And you took what the Company had actually in operation, or what was necessary to it for the purpose of its construction, in the way of borrow-pits, etc.?

A. Yes, sir. On the same sheet, the Kalama ferry-boat, with its equipment, tracks, etc., which includes two expensive inclines, and a large barge, for emergency use, the big steamer and all the facilities to make up and transfer trains across the river, were put down at the amount carried by the chief engineer. In checking it up we were so close to him that we preferred to take his figures.

Q. This work of checking up and putting down the figures, I take it, was done after you reached St. Paul and after the inspection?

A. Well, not wholly so. Wherever we could and had time we did it on the line.

Q. What did you do on the line?

A. Well, for instance, we checked up Duluth, Tacoma and Seattle, and one or two other places. The rest was all done at St. Paul. The dredging at various seaports is an item given me by the chief engineer of the Northern Pacific, because it is impossible for anyone to say how much money has been spent dredging. The general office buildings were given me by the same party, and, so near as I could check it up, were fair. The miscellaneous buildings—

Q. Did you examine the general office buildings?

A. Both in St. Paul and Tacoma.

Q. For the purpose of valuing them according to your own views?

A. Yes, sir. The "Miscellaneous buildings" takes in a big lot of items. The Northern Pacific, in snow-fences alone, have thousands and thousands of dollars invested. It has got a

boat on Lake Coeur d'Alene and has got a barge. It would take in all kinds of buildings, that we have no other heading for. We checked this up with a previous statement furnished, with a statement given us by the chief engineer, and adopted his figures, because they were fair. The telegraph line was a hard thing to settle upon. We got these figures from the superintendent of telegraph, and the ownership of the Northern Pacific is so mixed up with the ownership by the telegraph and telephone lines that we accepted his figures. The general and organization expenses, I put at $100 a mile. I arrived at that by figuring out what kind of an organization, such as a president, a secretary, treasurer and accounting officers, would be necessary during the period of construction. There is a typographical error, which says four years and should read eight, which I will explain later. The force necessary outside of the engineer's staff to properly account for the construction of the line,—included in that would be expenses for attorneys, condemnation suits and matters of that sort.

Q. That wouldn't be included in that, would it?

A. Well, condemnation. We have got legal expenses later, but that was bunching in another job. The additional freight charges on foreign lines, between four mills per ton per mile and tariff rates, amounting to $1,829,562; the estimate itself is based on four mills per ton per mile over a foreign road or over the Northern Pacific during construction. I left the cost of the transportation on the Northern Pacific at four mills per ton per mile, for that is about what the actual cost is, but on the foreign lines I endeavored, so far as I could get tonnage and location, to calculate the difference between four mills per ton per mile and the average carload commodity rate on foreign lines, and this item represents the difference between the two. And I show a separate statement of that kind, because at the Spokane rate case meeting that question was raised, that estimates should show tariff rates on foreign lines.

Q. In Ex. 24—Berry, where does the four mills per ton per mile appear?

A. It appears in each unit of construction. In the unit prices of each item is included—

Q. You include transportation?

A. Transportation at that rate.

Q. In making your estimate, Mr. Berry, will you state what figures you obtained from the Railway Company and depended absolutely upon?

A. I depended upon them for the gross amount of the bridging, and checked it up as stated previously; I depended upon them for the value of all real estate and right-of-way; Kalama ferry-boat, etc.; shop machinery and tools; dredging at various sea-ports; general office buildings; miscellaneous buildings; telegraph lines; the Minnesota & International Railway (they have a seventy per cent interest in it); the Duluth Union Depot; St. Paul Union Depot; Minnesota Railway Transfer Company; Lake Superior Terminal & Transfer Railway Company, at Superior; Northern Pacific Terminal Company, at Portland, Oregon; Seattle Union Depot and Terminal; all of these items I checked, so far as I could, to justify my belief that the amounts were fair.

Q. How did you check them?

A. By getting information on the ground and seeing that the various improvements were there and attaching a value to it, and if it came reasonably near, either over or above their figures, I adopted their figures.

Q. Perhaps you misunderstood my question. My question was what figures you obtained from them and absolutely depended upon without checking.

A. Real estate and right-of-way, telegraph line; that is all.

Q. Real estate and telegraph line?

A. And shop machinery and tools.

Q. Now, you have recited the figures which you obtained

from them and checked up from your own examination?

A. So far as I could go, yes, sir.

Q. Now, will you state what figures you depended upon yourself, your own knowledge and experience, absolutely for.

A. Construction of the road,—

Q. Including quantities?

A. Yes, sir,—value of the tunnels, ballasting, bridging; the 51 station grounds, general office buildings, miscellaneous buildings, organization expense, freight charges on foreign lines, ownership in following properties: Minnesota & International Railway, Duluth Union Depot, St. Paul Union Depot, Minnesota Railway Transfer Company, Lake Superior Terminal & Transfer Railway Company, Northern Pacific Terminal Company, of Oregon, Seattle Union Depot, and legal expenses.

Q. What prices did you apply in making up your estimated cost of construction, whether track, tunnels, bridges or buildings?

Witness produces paper headed "Basis upon which Estimate of cost to Reproduce the Northern Pacific Railway was made," marked for identification "Complainant's Ex. 26—Berry."

A. In getting up this letter (referring to Ex. 26) the exact basis of prices, we adopted the Interstate Commerce Commission's numbers and accounts. While they have not approved this as official, they did agree with the accountants of the railroads that that was a good basis for all future estimates.

Mr. DURMENT: At this point we move to strike out so much of the witness' answer as has been given referring to some sort of an arrangement between accountants of railroads and the Interstate Commerce Commission, as not responsive and as wholly immaterial and a conclusion.

A. No. 1, Engineering, 4½ per cent of all items except 43, 48, 47 and 35.

Mr. DURMENT: Do you mean that the Interstate Commerce

Commission has said that 4½ per cent is a proper basis?

Witness: No, sir; I said Item No. 1, according to the Interstate Commerce accounts—and there is the Rock Island form, which is identical with that which we use now-a-days in all our estimates—

Mr. O'BRIEN: You are referring to the division of accounts by the Interstate Commerce Commission?

WITNESS: I am referring to the way that I arrived at the unit prices.

Mr. O'BRIEN: No, but when you stated the method of computation as adopted by the Interstate Commerce Commission, you meant the division of accounts?

WITNESS: That is all.

Mr. O'BRIEN: The assigning of the items into separate accounts?

WITNESS: Yes, sir.

Mr. DURMENT: Of course, there is no objection to that.

WITNESS: Numbers 2 and 3, real estate, right-of-way and station grounds, secured from Mr. Cooper. I have given the details of that in previous testimony.

Q. These numbers refer, I take it, to the Interstate Commerce Classification of accounts?

A. Yes, sir, and just like that blank there, very similar to the Minnesota State Commission's.

Q. (Showing witness Complainant's Exhibit 27—Berry). Is this the Interstate Commerce Commission's Classification of accounts?

A. Yes, sir. No. 4, which is grading, clearing, grubbing and rip-rap, all prices are per cubic yard; earth 30 cents; loose rock 53 cents; solid rock $1.10; stone placed for rip-rap and dikes, $2 per cubic yard; clearing at $80 per acre; grubbing $14 per station;—which means an area of 100 feet long and 100 feet wide.

Q. Regardless of the actual width of the right-of-way owned by the Company?

A. Yes, sir; any additional width would be paid for on that ratio. The prices I have just named are ten cents above what we would have to pay contractors, and this ten cents covers the free transportation which is customary in contracts for contractors' outfits, men, tools, machinery, to and from the work, and any overhaul. The item 5 is detail of both yards and masonry, prices for lining tunnels with timber or with masonry, single and double-track.

Q. Does that Exhibit 26 show all of the details of the prices which you have applied in making this estimate?

A. Yes, sir.

Q. Now, how do you obtain those prices?

A. Ruling prices paid by railway companies in this locality.

Mr. DURMENT: As of date of June 30th, or at the time you made this estimate, 1908?

WITNESS: Well, it is the ruling prices about this time.

Mr. DURMENT: 1908?

WITNESS: Yes, sir. It is hard to draw a line between prices when the slump comes immediately, it is always hard to do that. Prices are recovering from the slump, so that today you could not let a contract at as cheap a unit price as you could six months ago.

Mr. DURMENT: Yes, but what I was getting at was this: You have given your estimate here of the value of the road as of June, 1908?

WITNESS: Yes.

Q. In your Exhibit 25 I find under the head of Contingencies ten per cent on $212,155,575.24. How is that item of $212,155,575.24 made up?

A. By adding together all the items about which there would be doubt as to whether you might not encounter more difficulties and greater cost than could be foreseen.

Q. How did you arrive at that figure ten per cent, why did

you fix it at ten per cent rather than any other percentage?

A. It is a customary percentage for engineers to use, and, to a certain extent, has become constant; but to verify that I have checked up the percentage of contingencies to actual cost on a number of lines.

Q. You say that, in your experience, that allowance of ten per cent upon those items which you have allowed it upon in this case is justified?

A. Yes, sir.

Q. By actual examples?

A. Yes, sir.

Q. What has been your experience in that respect in operations of any substantial magnitude?

A. They run over, rather than under, ten per cent, and much greater than ten per cent.

Q. Can you give some examples of experiences of systems in that regard from your own information?

Objected to as incompetent and immaterial.

A. Yes, sir. There was a line built from Leeds Junction, near Kansas City, to Belle, Missouri, a distance of 183 miles, through a very rugged country, and the contingencies there were 7.9 per cent; 143 miles built in Arkansas of heavy work amounted to 19.2 per cent contingencies; a line from Alexandria to Eunice, Louisiana, which I prepared the estimate for myself and thought it was ample, 12.3 per cent.

Q. How many miles?

A. A distance of nearly 63 miles. A line from Irving to Carrolton, Texas, which I thought I had "loaded down to the guards" with all it would stand, ran over 8.8 per cent, and we had a washout this last summer, that we are just busy repairing now, that will cost us at least $75,000.

Q. Which will be what per cent?

A. Well, I can't tell you that, but it will run up in the neighborhood of 12 per cent on that job. Mr. Darling was con-

nected with two of those lines that I have named and made the estimates, and I succeeded him to finish the work on one of them, after he left the Rock Island road, though his estimates were just as good as mine in that respect. I talked with him recently in regard to his estimates on the Northern Pacific road, and he tells me they are all overrunning from 20 to 25 per cent. On some extremely heavy work of the Union Pacific and Oregon Shortline, that I was directly connected with, I only recollect of one case that the work was finished inside of the estimate, and with the millions of dollars that were put in there, the estimates overran, in one case, 25 per cent, and almost invariably from 15 to 25 per cent. The one case that I remember was a distance of 30 miles of single-track railroad across the Rocky mountains, and on an estimated cost of $100,000 a mile we overran 25 per cent. We also had, in the construction of a line near Evanston, Wyoming, through a tunnel. where some of that work overran 100 per cent.

Q. How much construction work did you do upon the Union Pacific road while you were chief engineer?

A. Say in round figures, 250 miles. I was recently called to the Erie railroad, and in company with Mr. Bush, the chief engineer of the Lackawanna railroad, to go over a new low-grade line that they were building from Cuba to Hunts, New York. Unfortunately for the engineer, he didn't have any contingency, but we worked up an estimate and we found that that was overrunning the estimated cost 20 per cent. They have one mile where they cross the Genesee river and the Pennsylvania railroad which is going to cost about $800,000. The engineer's original estimate contemplated a trestle bridge from the end of the Genesee river bridge over the Pennsylvania railroad; the management afterwards decided that they would put in a concrete double-track arch and fill this temporary trestle, which cost about $150,000 more than the timber trestle would have cost, and more than the engineer estimated or was

led to believe was necessary. As a very pat illustration of that, on a part of this same line we came across a peat marsh that was just 3,300 feet long from grade to grade. When I got there they had a water-hole 80 feet long and they were going to put a pile-bridge in there, at increased expense, so as to fill it. The cross-section notes of that fill was 15,600 yards. When I was there they had put in that fill a little over 300,000 yards. They had to pay an extra price for the quantity over the cross-sections because the contractor was moved back. They were trying to put in an 80-foot bridge across that hole at that time, and while the original cross-section showed there was about a six-foot fill—

Q. Upon which the estimate was made?

A. Yes, sir—it was about 22 feet in that hole, and when they built that bridge Mr. Bush and I estimated it would take about 80,000 yards more, making a total of 380,000 yards against the estimate originally of 15,600. I told Mr. Stewart, who was the chief engineer of the Erie, that I was very much interested in that and that I wanted him to send me a profile and the figures, which he did. In addition to this increase in quantity, they paid the contractor three cents per cubic yard more to make that very large excess fill.

Q. Now, Mr. Berry, are such things as that, in your experience liable to occur in railroad construction?

A. Yes, sir, at any time. I will illustrate that again. This work that Mr. Darling started and I inherited, 143 miles in Arkansas, he had good reason to believe that a great deal of the material to make some of those fills could be secured from the sides. We had wet weather there continuously for three years, one year while he was there, and two years while I was there, to finish that piece of line. It was impossible for us to get the material from the sides. We put in temporary bridging that we filled up afterwards. We contracted with the contractor, at an increased price per cubic yard, to haul that

material from cuts outside, some of it as much as twelve miles, and it cost us nearly $400,000 more. In addition to that, we had a bridge over the Wichita river. We had great difficulty, on account of floods, in getting the masonry in and it was finally finished at great cost. We went to the government's records at Camden, Arkansas, to find out when was the most suitable time for us to raise that span. We wanted to put in a false-work which would block navigation. We found that during the months of November, December and January, for a long period of years, there had been no navigation in that stream and it would be safe to block it and raise our truss. We started to do it. Water came, not only once but a number of times; it washed the false-work out, and we had a claim against us by the only boat-line that ran there, and we paid $1,500 to settle that claim, and we had to replace the timber in the false-work. Now, I don't see how anybody, with the records of the government for a long period of years before him that there was no high water in that river at that time, could foresee it unless he was a mind-reader.

Q. What, in your judgment, is the propriety of this ten-per-cent contingency charge notwithstanding the fact that you are estimating the present cost of a system which actually now exists and the condition of which you know?

A. There is no engineer, in my opinion, living to-day—I don't care if Mr. Darling did build the Northern Pacific, he could not anticipate the difficulties that he might have to contend against. Even he could not do it.

Q. Do you know of a recent illustration of that in regard to the Milwaukee's construction out there?

A. I do.

Q. Will you state what that is?

A. I got permission to find out what their washout cost in Montana during last June. Their washout, so far as they could figure it, was going to cost them about $600,000 in the

state of Montana. There will be additional charges on to that, on account of moving contractors in and paying railroad rates over the Northern Pacific to move them, and the result is that the quantities and cost will be increased, so that, in my opinion, the washouts on the Milwaukee & St. Paul road in Montana in that June freshet—

Q. During construction.

A. —during construction, will amount to $700,000. Further, no engineer that will go over that road in five years from to-day and estimate it, will know one thing about that unless he is told,—nor of any other railroad. Now I want to give a little evidence, further; I want to impress on these gentlemen a little of the conditions. I know there is a good deal of talk about engineers' contingencies: I was one of the number—

Mr. O'BRIEN: Please note an objection that there is no question asked and that this is not responsive to any question.

Q. I think there was a question asked. Can you state some other examples that you think justify you in that allowance of ten per cent contingency?

A. Yes, sir.

Mr DURMENT: We object to that as immaterial and incompetent.

A. I was a member of a board of engineers who were asked by the Illinois Central Railroad to go over their heavy piece of construction from Corinth, Mississippi, to Haleyville, Alabama, that the contractor had thrown up work upon in order to see if his items were fair. The piece was heavy and will overrun over twenty per cent the engineers' estimate.

Recess until 2 P. M.

AFTERNOON SESSION.

Q. What is your judgment with regard to the reasonableness of the figures furnished you by the Northern Pacific Railway Company, when based upon your knowledge of the System and

your knowledge of other systems by comparison?

Mr. DURMENT: We object to that as incompetent and immaterial and not a matter of expert opinion.

The MASTER: Does that refer to figures that he has mentioned already in his testimony?

Mr. HOW: Yes, your Honor.

The MASTER: Objection noted.

A. I think they are conservative.

Q. In placing your unit prices for the purpose of making this estimate, did you use the unit prices of 1906 when you made your Spokane estimate, or those of the present time?

A. Used the prices prevalent at that time, which was in March, 1907.

Q. How did those prices compare with prices that you would have to pay at the present time, if you were going to do the work at the present time?

A. I don't think there would be any material difference. The prices might possibly be a little lower just at present, on account of the scarcity of work, but take it as a general rule, they are fair for all time.

Q. How have you arrived at the cost of engineering in your estimate? You stated it to be four and one-half per cent on 208 odd million dollars. How do you arrive at the figures 208 million dollars?

A. I took the actual construction of a number of lines.

Q. How did you arrive at the figures 208 million dollars as the basis in your exhibit 25?

A. I took all those items from the engineering department and Mr. Darling and took four and one-half per cent of that.

Q. How did you arrive at four and one-half per cent?

A. I took a number of statements of actual cost of railroads and thought that that was a fair average of a number of them, some of which cost more, some few a little less, and they are figures that I am now using in my estimates and they

are higher than I have used in the past, but in a great many cases the engineering has overrun the estimated cost, and I have been obliged to raise the ratio.

Q. What does engineering expense cover?

A. It covers all the original investigations, surveys, construction, up to the time of delivering the road over for operation.

Q. How do you arrive at the cost of legal expenses contained in you estimate?

A. Well, that is an average that we took of several cases, and it is somewhat of a variable quantity, but that is a fair average per mile of road.

Q. State what your judgment is as to whether or not it is a reasonable allowance to be made.

A. It is.

Q. And what is your judgment with regard to the engineering allowance?

A. It is a conservative allowance. If I would do anything I would increase it.

Q. How long would it reasonably take to construct the Northern Pacific line as it is at present?

A. I think if it were done in eight years, from the very beginning to its completion, it would be pushed rapidly.

Q. You have referred in your testimony to an item of five per cent per annum for four years, being one-half the time to build the road; allowed two per cent per annum for earnings over operation, making net three per cent for interest on $349,924,919.47. How do you arrive at that last named figure, $349,924,919.47?

A. Taking all the items except real estate, and one or two others.

Q. Interest you include?

A. Interest charges, yes, sir. I should say, not excluding real estate. Taking all those items that they have to pay

money for, from time to time, so as to go ahead to build the line.

Q. Now, you have not included equipment in your statement?

A. No, sir.

Q. So you have not included, of course, equipment in the calculation of interest?

A. No, sir.

Q. What have you to say with regard to the reasonableness of that allowance in case of present construction of the System?

A. I think that interest account is, if anything, a little too low; for this reason I have allowed two per cent on that amount as net earnings during the operation of the railroad.

Q. While it was being constructed?

A. While it was being constructed. That mean this: that that two per cent was worked out on a basis that there might be a thousand dollars a mile of net earnings from the very beginning; that would be approximately forty per cent of the gross earnings; in other words, the earnings per mile of railroad would be $2,500 per annum, $1,500 to pay operating expenses, being 60 per cent of the total, and $1,000 a year net earnings that would go to the credit of construction per mile per annum, which in my opinion, is, if anything, too large an amount of net money. In other words, the interest account might be increased over what I have given it.

Q. What things, in your judgment, in a railway system properly managed and conducted, depreciate, from time to time, in value?

A. Well, I have never assumed that there was any depreciation of the road as a whole. While it is true that ties rot out and that rail wear, yet there are so many things that the road appreciates in value that it more than counterbalances that wear. In other words, the railroad comany endeavored to

keep the road up to a high standard; while it is not all new, yet it is all good—

Q. Careful operation?

A. —And I have never believed that the item of depreciation was a proper one on any railroad that is kept up as it should be.

Q. What is your judgment with regard to the value of the Northern Pacific System, as an operating tool, for availability, at the present time, as compared to what it would be if it were a new line just constructed, and as near as possible in its present shape and handed over to the operating department?

A. It is in much better shape in many respects.

Q. Can be operated more economically?

A. I think so.

Q. What is the condition of the Northern Pacific System at present with regard to maintenance and its availability for operation? Is it in good shape or poor shape?

A. It is in good shape. Of course the road is torn up in places where they are making these grade reductions, and that can't be helped, but aside from that its physical condition is good.

Q. What is the difference between the aggregate of this estimate which you have made recently and which you are now offering, and the estimate in the aggregate which you made for that purpose of giving testimony in the Spokane rate case?

A. There is a difference of $49,813,942.

Q. Which is the larger?

A. The recent estimate.

Q. How do you account for that difference?

A. The later estimate includes some items that were not taken into consideration in the first estimate and are all within the limits of the 5,785 miles, amounting to $8,391,119, leaving what you might call a net increase of $41,422,823.

Q. How do you account for that net increase?

A. Well, the principal increase is in the mile-rate for the roadbed. In my opinion, the quantities that I got in 1907 were not sufficient, or did not include all the work that they had done since the road was built, and the value of the road appreciated. That is the principal item. There is also an increase in a number of smaller items. For instance I estimate the tunnels as being worth $161,990.40 more than that estimate; that the ballast has an increased value of $1,420,492, due to this fact, that a great deal of ballasting is done with cinders that is charged to operating expenses and is done from year to year on each division, but it is a well-ballasted road. I have given credit for every bit of that. The organization expenses are increased $289,250; the additional freight charges amount to $1,829,562.

Q. Because of your using tariff rates outside of Minnesota?

A. Yes, sir, —No, not outside of Minnesota, but outside of the Northern Pacific railroad. I find an increase in value in the Seattle union depot over the previous figures.

Mr. DURMENT: How much, please?

WITNESS: $369,750. The contingencies are increased $8,220,840.52. I have not taken any contingency on the real estate, which is, under all ordinary conditions, the right thing to do. The engineering has increased $721,638.10; the interest charge has increased $6,358,695.33.

Q. You had before you, as I understand it, in the Spokane rate case, a statement of quantities furnished by the Northern Pacific engineering department?

A. Yes, sir.

Q. And you worked from that?

A. Yes, sir.

Q. And you applied prices that were current at that time for the work necessary to be done?

A. Yes, sir.

Q. I understand that in this statement you have applied

the same prices as you applied in making the former statement?

A. Yes, sir.

Q. Did you have before you your Spokane rate estimate while you were doing this work?

A. Yes, sir.

Q. Did you work from that estimate in doing this work?

A. Not at all.

Q. And why didn't you?

A. Because the basis of each estimate was entirely different.

Q. Did you have Mr. Darling's estimate before you when you were doing this work?

A. No, sir.

Q. When did you first compare the result of this estimate, the aggregate result, with the aggregate result reached by you in the Spokane rate case?

A. At 7 o'clock last night.

Q. And why not before?

A. Because it was not ready to make any comparison until all of the new estimate was figured out.

Q. And that was caused by the entire difference in method of reaching the conclusion, I take it?

A. The difference in making the estimates, yes, sir.

Q. Do you know how far apart your present estimate and Mr. Darling's estimate are, approximately?

Mr. DURMENT: Now, Mr. How, I think if he is going to make a comparison between his estimate and Mr. Darling's, it should be the Darling estimate, which is in evidence somewhere.

Mr. HOW: Mr. Darling's estimate, which is in evidence in this case is what I refer to.

Mr. DURMENT: That would be Ex. 3, wouldn't it?

Mr. HOW: Ex. 2. That is Mr. Darling's final estimate.

WITNESS: For the System?

Q. Yes, for the system.

A. Yes, sir.

Q. How far apart are they?

A. I am above him $5,637,661.

Q. And he included the lines in Manitoba at $7,000,000, which you did not include?

A. No, I have deducted that, too.

Q. You have deducted that?

A. Yes, sir; on the same basis, as nearly as we can work it out quickly, there is a difference in which my estimate is greater than his this amount.

Q. In your judgment, and based upon your experience and knowledge of the profession, what have you to say with regard to the wisdom and propriety of the location of the line and branches of the Northern Pacific Company?

A. I think at the time when they were built it was well located and well guarded.

Q. Have there been some changes in location since?

A. Minor ones, a great number.

Q. And can you tell for what purpose and why?

A. Well, principally for the benefit in alignment and distance, and occasionally to cut out some humps in the grade.

Q. What is your judgment with regard to the justification of those changes?

A. They were all right.

Q. Now, in making your estimate, did you include the cost of the construction of the abandoned part as well as the new location where the line had been changed?

A. No, sir, not one.

Q. You took the System as it now exists?

A. Yes, sir.

Q. What have you to say with regard to the location and acquisition and possession of terminals by the Northern Paci-

fic Company, having reference especially to its larger terminals?

A. I think it was well thought out, and you find very few railroads who have so thoroughly entrenched themselves as the Northern Pacific have in the large cities.

Q. Are their terminals in good shape?

A. Yes, sir.

Q. Now, Mr. Berry, you might have made, by the use of a year of time continuously, a much more detailed and more extended and careful estimate of the cost of construction of the Northern Pacific Company. In case you had made such an extended examination and inspection, and an estimate based upon it, how, in your judgment, would it compare, not with regard to particularity of figures, but whether it would be greater or less, and how much, relatively, more or less, than your present estimate?

Mr. DURMENT: That is objected to as incompetent, irrelevant and immaterial and purely speculative.

The MASTER: Objection noted. You may answer.

A. I think that the estimate of the value would be increased.

Q. Will you say why?

A. In going over the line, everything that you see is estimated. If you could get into it more in detail and find out what had been done during the period of construction, you would find a great many items that no engineer could see now. I will illustrate that by saying that the rip-rap and the dikes along the Northern Pacific railroad, which form no inconsiderable amount, have settled in the rivers, been washed out; it is impossible to say how much of that has gone down, but it has been replaced. The item of rip-rap has been increased, without any charges to capital account. And another thing, if you were to go into it and find such a case as I cited this morning on the Milwaukee & St. Paul road, if you could get at it, that would have to

be added to the cost of construction, just as the St. Paul road will have to add to it. So that the estimate is based on what you see, and the contingent features are what you may get by having more time and asking questions of parties who are more familiar with the work.

Q. And I understand that the use of more time would disclose more things to be estimated?

A. Yes, sir.

Q. And that you would not expect, by the use of more time, to eliminate anything that you did see and estimate?

A. Not a dollar.

Q. How were the branch lines that you didn't go over estimated? How did you gather your material for the purpose of making the estimate of those lines?

A. I made a little statement of the various items entering into the construction of every line, every branch, that I did not go over; I asked the local officials questions about each one of those items. I purposely went over one or more branches in each state and made an estimate myself for the purposes of comparison. I then classified these branches we didn't go over, the same as those that I did and attached a value to it.

Q. Those in the neighborhood that you did go over?

A. Yes, sir.

Q. Those in the same territory and state?

A. Then I got from Mr. Gray, the auditor, a statement of the actual cost of those branches, so as to check, in so far as I could, the value per mile of actual cost, with the basis upon which I got my figures.

Q. How did you find that your figures compared with Mr. Gray's figures?

A. In some cases they were over, some under, and in a number very close indeed.

Q. And are you satisfied that your estimate with regard to those branch lines is a reasonably accurate one?

A. Yes, sir.

Q. Now, upon the whole estimate, Mr. Berry what is your judgment as to whether the estimate is a reasonable, conservative, moderate estimate?

A. I believe it is very conservative. If anybody could buy the Northern Pacific railroad for the amount named, it would be a good investment.

Q. In Ex. 26, under No. 4, grading, clearing, grubbing and rip-rap, you set earth at 30 cents, loose rock at 53 cents, etc. I understood you to say that those figures, respectively, with regard to each of those items, were ten cents higher than contractor's prices. Perhaps I haven't that accurate.

A. That is right.

Q. Now, for what purpose do you add that ten cents per yard to the contractor's price?

A. It is almost universal, or has been in the past, to contract to transport men, teams, tools, materials and certain supplies used in construction, free over the lines of road you are building.

Q. That is, free to the contractor?

A. Free to the contractor. The cost of that work is charged up to the cost of construction. It is a somewhat difficult thing to get at, but since I have been on the Rock Island, we have taken a number of figures of that kind and tried to arrive at the cost, per mile, or per hundred miles, of transporting contractor's materials and men free, and I have used that as a basis. It also includes what is indefinite until you take each trifle by itself, the quantity of overhaul—and that ten cents includes the overhaul and the transportation.

Q. Then the thirty cents is, as Mr. Darling, I think, expressed it, the cost to the Company, as contrasted with the twenty cents which is the compensation to the contractor only?

A. Yes, sir.

Q. Now, Mr. Berry, I understood you to say that you keep

advised, in your profession, in the performance of your duties and in connection therewith, with the cost to other companies of building and constructing railway lines; from time to time you get what information you can in regard to them. Have you acquired information with regard to the construction of the Milwaukee road across the continent, parallel with the Northern Pacific, in some cases?

A. Yes, sir.

Q. Do you know how the estimate which you have given of the present cost of the construction of the Northern Pacific road compares with the actual cost to the Milwaukee of its construction parallel to the Northern Pacific road?

A. Yes, sir.

Q. Will you state how it compares with your estimate?

Mr. DURMENT: We object to that as incompetent and immaterial, no sufficient foundation laid.

Attorney General YOUNG: Based upon hearsay.

The MASTER: Objection noted.

Q. I will re-state the question: When compared with the Milwaukee cost of construction, will you state whether or not your estimate is conservative or otherwise?

Mr. DURMENT: We object to that as incompetent, immaterial and no sufficient foundation laid.

The MASTER: Objection noted. He may answer.

A. I should say that the Northern Pacific estimate that I have made is conservative and within the figures of the cost of the Milwaukee road from the Missouri river to Tacoma and Seattle.

Mr. HOW: I offer in evidence Complainant's Exhibit 25—Berry.

Mr. DURMENT: We object to that upon the ground that no sufficient foundation has been laid for at least a very large part of the figures contained in it.

Mr. HOW: And I offer Complainant's Exhibit 26—Berry,

which is an explanation of the basis upon which the estimated cost introduced is made.

Mr. DURMENT: If Exhibit 25 be finally received, then Exhibit 26 should be received, as explanatory. If not, it is immaterial, and for that reason we object to it as immaterial.

Mr. HOW: I understand you take this position, that if there is any item going to make up that statement which is incompetent, it affects the entire statement and renders the entire statement incompetent; am I right about that?

Mr. DURMENT: We make no point that if, upon the evidence as it stands, a sufficient foundation has been laid for his testimony as to any item or items contained in that exhibit, the items which are based upon such sufficient foundation must not be excluded, but because there are other items as to which there has been no foundation laid.

Mr. HOW: That is satisfactory. I offer Complainant's Exhibit 27—Berry, which is the Interstate Commerce classification of accounts.

Q. In your estimate as shown in Exhibit 24 you put in three-tenths of a mile of siding for each mile in each class excepting classes A, B and C. How did you obtain that three-tenths of a mile?

A. We first had it smaller than that, but when we worked up the number of miles of sidings on the principle stations we found that the average rate per mile of sidings was in excess of that amount that we first started out, and we changed it to agree so that the sum of the two equals the sidetrack and spur mileage of the road.

Q. How does the three-tenths mile of siding per mile of track compare with the ordinary run of sidings in your experience with other companies?

A. It is about the same figure as on all other roads of the same class, that there is about one-third of the mileage of the main line and branches of sidings and spurs.

Q. How does it happen to be on the Rock Island, for instance?

A. Well, it is very nearly the same. On the Union Pacific, it was exactly the same, thirty-three per cent; one-third of the total main-line and branch mileage was sidings and spurs.

Q. How about culverts, as they run upon the Northern Pacific road, how do they compare?

A. I think their culverts are very much better than on most railroads, because of their permanency.

Q. And how about their number?

A. There are a great many of them, and some of them very important, arched culverts, stone arches, and other types of construction, that are first class.

Q. You do not think your figures that you have allowed for culverts, of eight million dollars for the balance of bridges, including culverts and pipes, to be unreasonable?

A. No, sir.

Q. What have you to say in regard to the conservatism of those figures, bearing in mind the importance and excellence of the culverts and drainage facilities?

A. I think they are within safe limits of an estimate, conservative.

CROSS-EXAMINATION.

By Mr. DURMENT:

Q. I understand that, before beginning to make your present valuation, that is, the last one you made, you, together with your assistant, made up a set of tables, which is Exhibit 24, and in arriving at the valuations, that is, the total amounts, you used these tables very largely?

A. Altogether, yes, sir.

Q. The tables A to L, I think you said, inclusive, were for single-track lines?

A. Yes, sir.

Q. And from "M" to "T", both inclusive, double-track lines?

A. Yes, sir.

Q. And the items under the head Class, at the left, represent the particular matters which are taken into account in the preparation of the table or the values?

A. In determining the quantities.

Q. Does this exhibit also contain a table of values?

A. Yes, sir.

Q. The table of values begins with the item under the head "Class of Grading", does it?

A. The table of value is the lower half of the sheet.

Q. Your beginning item, though, under the head Class is grading, is it not?

A. Yes, sir.

Q. What is this just above? that ten per cent included for extra grading, what does that mean?

A. In taking the actual quantities of material moved we added ten per cent to all those quantities and added ten per cent to the total quantities for slips and slides and additional material; that is almost universally used and paid for to the contractor.

Q. Well, does that mean ten per cent is added to the quantities of grading in addition to the amount shown in your table here?

A. Yes, sir.

Q. Or ten per cent in addition to the cost?

A. No; the quantities on the upper part of the sheet will be the actual quantities of the cross-section with ten per cent added to them. I think it reads so, doesn't it?

Q. To illustrate: We have here, take the third item—

A. Under Class C?

Q. Yes. Fifth class, C, that would be 18 here, wouldn't it? Just show us where this ten per cent extra comes into these tables.

A. If you were to take a ten-foot fill for a half a mile of road—

Q. That would be under what letter?

A. Under letter "C", down under the head of Average Fill per Distance; if you were to take a ten-foot fill for half a mile of distance and add ten per cent of those quantities, it would equal 33,413 cubic yards of earth.

Q. Then this quantity here 33,413 contains this additional ten per cent?

A. Yes, sir.

Q. You would take the actual quantities that you would figure for the dimensions?

A. Yes, sir.

Q. And then add ten per cent of that quantity to get your total of 33,413 used in your table?

A. Yes, sir.

Q. And each one of those cubic yards there is the result of the computation of the contents, or the actual quantities for those dimensions, plus ten per cent?

A. Yes, sir, plus ten per cent of the quantities.

Q. In one of your other exhibits, in making up your valuations, you have included ten per cent of something like a value of 212 millions, for contingencies?

A. Yes, sir.

Q. That ten per cent includes a ten per cent upon this ten per cent extra, also, does it not?

A. Yes, sir. Let me draw a distinction there for you that the ten per cent for contingencies is not ten per cent of quantities, it is ten per cent of the amount or value.

Q. So that, in your final estimate of the value, where you have given ten per cent to cover contingencies, you have first taken the cost, which would include the cost of this extra ten per cent on the grading?

A. Yes, sir.

Q. And then you have added, over and above that, a ten per cent on the cost price to cover contingencies?

A. Yes, sir.

Q. It would figure out 21 per cent of the original amount of grading for contingencies?

A. Practically so.

Q. Have you included in these tables here, in any other item under the head of Class than this grading, anything for contingencies or any extra amount?

A. No, sir.

Q. Who made these figures of values here on this table? I mean the tables of values, you or your assistant?

A. Which do you mean?

Q. Well, all of them.

A. Quantities or price?

Q. I mean price.

A. My assistant did it, at my direction.

Q. What figure did he include, or what price did he put per cubic yard, for the grading, including clearing, grubbing and rip-rapping, for one mile of road, under column A?

A. $11,696.

Q. At what figure per cubic yard?

A. For what?

Q. For the work of grading.

A. Thirty cents for earth, fifty-three cents for loose rock, $1.10 for solid rock.

Q. Would there be included in that item of grading, including clearing, grubbing and rip-rapping, $2,623, the removing of earth, the removing of loose rock, the removing of solid rock?

A. No, sir, the grubbing and clearing and rip-rapping have each a separate unit price.

Q. Will you just tell us what are the separate prices for rip-rapping, what for grubbing, what for clearing and what for grading?

A. Clearing, $80 an acre, grubbing, $14 a station, rip-rapping $2 per cubic yard, grading 30 cents for earth, 53 cents for loose rock, $1.10 for solid rock.

Q. That was for one mile, as I understand it, that $2,623, under head A?

A. That is right.

Q. How many yards of earth did you figure would be removed there?

A. If it was all earth it would be 4,881 yards.

Q. That is not the question. Take that one item there, how many yards of earth, how much clearing, how much grubbing, and how much rip-rap did you figure would be used in that mile?

A. The earth work or rock, whichever it may be, at any figure shown in that column, multiplied by the unit price, plus the clearing, grubbing and rip-rapping, which we took and entered up, multiplied by its respective price, made $2,623.

Q. Yes, but what does this column A represent? Wherein does that differ from columns B, C, D, and so on?

A. In a different quantity of grading, and that is all, because the grubbing and clearing is something that you have to take from the line as you find it.

Q. What I want you to tell me is how much in this table of that $2,623 was for grading, how much for clearing, how much for grubbing and how much for rip-rapping.

A. That is a general proposition. There may be no rip-rapping at all in that $2,623, there may be no grubbing and clearing in that; that is a piece of the very lightest kind of construction of a prairie line and we would have to refer to the books for every mile of the road we passed under class A to determine what that was.

Q. Then how can you say that $2,623 is the cost or a fair table for that kind of work?

A. Simply because wherever there is grubbing and clearing

or rip-rap it is shown in the other columns in an increased price per mile. It might be that quite a number of those prices included no rip-rap, no clearing and no grubbing.

Q. Yes, but does this table show just what would be the situation as to one mile of Class A as to grading, grubbing, clearing and rip-rap?

A. As to grading, yes; as to clearing, grubbing and rip-rap in detail, no.

Q. Then under this Class A, this item $2,623 would be applicable to a case where there was no clearing, grubbing or rip-rap?

A. Yes, sir.

Q. And it would be applicable to a case where there might be a great deal of rip-rapping, some grubbing and a lot of grading?

A. A lot of grading, did you say?

Q. Yes, grading.

A. It couldn't be built without some grading.

Q. But I say it would apply to a case where it included grading and rip-rapping and no clearing, would it not?

A. Yes, sir.

Q. Same price?

A. Yes, sir.

Q. It might also apply to a case that had grading and rip-rapping and no clearing and grubbing?

A. Yes, sir.

Q. Or apply to a case which would have clearing and grubbing and grading and no rip-rapping?

A. Yes, sir.

Q. Then it is a mere arbitrary estimate as to an average price, is it not?

A. No, sir.

Q. It is not?

A. No, sir.

Q. Will you please explain, then, how it can be definite and certain as to the cost of one mile of that kind of road when the same figure would be used for three or four different classes of road?

A. Examination of the road determines—that particular mile, rather—determines into what class it shall be. We could entirely remove your question if we wanted to have another item or several items, Grubbing, Clearing and Rip-rapping We could have that and have all those separate items, and that would indicate, for each class, whether it included them all, but the sum total would be the same thing and the examination would cover the same thing.

Q. That is, the sum total might be the same thing, and it might not, depending on how the mile of road was made up, wouldn't it?

A. It wouldn't come into this class.

Q. I understood you to say that this Class A would include—

A. Well, it might possibly include some clearing and it might include a little rip-rap, possibly.

Q. And it might not include any of those?

A. It might not include any of it, but as I explained to you, that is the cheapest class of construction you have talked about, it is for a prairie line, and, so far as that is concerned, you could scratch out grubbing and clearing and rip-rap on it.

Q. Then that covered grading, pure and simple?

A. There is no doubt about it in that type of construction, yes, sir.

Q. And there would be no rip-rapping in that at all?

A. Possibly not a cent's worth in it.

Q. And yet there might be?

A. Well, there might be a little bit, but if there is any it is a very small quantity.

Q. These tables are not tables, as I understand it, that have

been made up and are published and generally accepted in the profession as covering this class of work?

A. No, sir.

Q. They were tables made by you and your assistant, only?

A. Yes, sir, for a specific purpose.

Q. In the next item in this table, under column A, we have Bridges, Trestles and Culverts, $1,015. How did you come to figure out that item for a mile of road under Class A?

A. After deducting from the total cost of the bridges and culverts what we calculated, there was an amount of $8,878,229. Now, we apportioned that amount in 5,785 miles of track, making for single-track, main line, including bridges, or culverts or siding, $2,030; for double-track, main line, including sidings, $3,248; and single-track, branch lines, $1,015. To verify that, in a general way, we figured out about how much bridging or culverts there might be on a mile of track, to verify those figures, and as there were so many culverts, arches, vitrified pipe, cast-iron pipe and everything of that sort, we arrived at a ratio, as given, and, while on some miles it might not be that, on other miles it would be more; and as we noticed the number of culverts, etc., we classified it as A, B, C, and so on; and there is no other way of arriving at that approximately than in some such way, except to measure and know the conditions of construction of every culvert and bridge on the line.

Q. Then as I understand it, you took what the Northern Pacific Railway officials furnished you as the total value of bridges, or bridges and culverts, on their line, something over twenty millions of dollars?

A. Yes, sir.

Q. You then estimated or determined, in some way satisfactory to yourself, the cost of a large number of these large bridges, and the value or cost of them, as you estimated them, as something over eleven millions; then you took that eleven millions which you estimated as the value of the large bridges

and culverts from the twenty millions and over, which had been given you as the total value, and left the figure of eight millions and over which you have testified to, and that figure of eight millions, thus obtained, is the one which is distributed and upon which you arrived at the value of $1,015 for bridges and culverts under Class A; is that right?

A. Yes, sir.

Q. You made no estimate or examination at all to determine the total value of all the bridges and culverts on the line?

A. No, sir.

Q. And this table is based upon the assumption that the railroad officials gave you the correct amounts or correct values?

A. Yes, sir. I also know another thing, which I have brought out in this statement Exhibit 26—Berry, that when you take twenty millions of dollars and divide it by 5,785 miles, making an average cost for bridging of about $3,517 per mile, it is a reasonable and conservative average per mile for bridging on the Northern Pacific railroad.

Q. Well, why on the Northern Pacific railroad more than on other lines?

A. Simply because I know, in comparison, what bridging costs on the other lines. I know, to illustrate, that when we double-tracked the line from Kansas City to Topeka, on the Union Pacific railroad, sixty-seven miles of railroad, the extra bridging cost us $10,000 a mile; and I also know what the value is on the Union Pacific and parallel roads similar to the Northern Pacific, that the $3,517 is a fair, conservative estimate for bridging and culverts.

Q. I suppose that the amount reasonably necessary for culverts and bridges might depend somewhat upon the character of the country and the streams, might it not?

A. Yes, sir.

Q. And no one road, unless it is very near, in the same country, can be a fair criterion for another?

A. Well, not if you want to be exact, but as a matter of comparison, yes. I further know this: That the custom of the Northern Pacific is that when a structure is to be renewed in kind and it is found that you can substitute some other type of construction which we call permanent, for instance, renewing a pile-bridge, thoroughly new, it will cost a thousand dollars. If you could put in an iron pipe and fill that bridge up and it cost $1,249 there would be no charge to capital account, the $250 is the limit. If it got to be $1,251, they would charge the $251 to capital account and the $1,000 to operation. So that there are a very large number of the smaller culverts on the Northern Pacific Railroad that are put in in that way that are not represented in this twenty-odd million dollars.

Q. Then in your opinion there are a great many culverts that are not charged to capital account on the Northern Pacific?

A. Yes, sir; that is, where the cost was within the limit or a little over, the cost of renewing in kind. I also know another thing, that the Northern Pacific have rebuilt a great many pile-bridges, of the same general character, but stronger in some respects, any additional pile or bent which would amount to ten dollars apiece, one or two extra stringers to accommodate the heavier power, it is all charged to operating expenses or income account, so that there is a better bridge, a stronger bridge, though a pile-bridge, in which there is no charge to capital account and not included in that twenty millions of dollars.

Q. Now let us get away from your general knowledge and get back to this specific thing.

A. No, that is not general knowledge, that is specific.

Q. As to this $1,015, I understand that having arrived at a total of $8,878,229, in the way you have testified, as the value of culverts and bridges on the Northern Pacific system, not taking account in your testimony of the eleven millions and something, you figure out that on a single mile of track under

classes A, B or C, there would be apportioned to that, properly, $1,015 for those culverts and bridges?

A. Yes, sir.

Q. What difference, if any, between the classes of a mile under A, B and C as to the general construction of road is there?

A. Practically no difference. B and C might contain a little rock. It might be a different condition in which the bridges and culverts were even less than in class A actually.

Q. Yes, but I mean as to other things than bridges and culverts.

A. Well, be specific, please, and I will answer if I can.

Q. Well, I find here that before we take bridges and culverts we have under your heading of Grading, Rip-rapping, Grubbing and Clearing, for A, $2,623; for B, $5,060; and for C, $11,183; indicating that there is a very decided difference in the character of the country through which those roads would be built. Now, wherein would be the difference in those three lines, without reference to bridges and culverts?

A. In the quantities in the roadbed. It might be that there were more cuts; it might be that in class A it was all fill for the whole mile; it might be a small fill; it might mean that in class B or C, depending upon which base we took, there were cuts and fills alternating. I will illustrate that if you want a specific case.

Q. I don't care for the specific case. As a matter of fact, in the case of A, B and C there might be any number of miles of road that would not have any bridge or culvert in them, mightn't there?

A. I doubt that very much. There might be a few, but not many.

Q. And there might be others that would have a very considerable number within a mile?

A. Yes, sir.

Q. Now, take under the heads D, E and F, down to L, inclusive. You seem there to have just doubled the amount per mile for bridges, trestles and culverts that you had under A, B and C, and why that doubling? they are both single tracks.

A. Yes. It might be that on a main line you would have a class of bridges and culverts of a better grade, many more culverts of a permanent character; in the lighter branch lines timber would be almost wholly used; on the heavier branch lines they may have replaced the timber work with vitrified pipe, cast-iron culverts or masonry culverts of some kind, or it may have been built in the original, hence it has a greater value per mile.

Q. Do I understand that under A, B and C these are branch lines and sidetracks?

A. No, there may be, right in that, a mile of main line.

Q. In A, B and C?

A. Yes, sir.

Q. That would be the same whether it is main-line track or side-track?

A. Anywhere, that fitted these conditions.

Q. And the same thing would be true as to the columns D to L, inclusive?

A. Yes, sir.

Q. It might include either main-line or branch-line?

A. Yes, sir.

Q. Then the question of main-line or branch-line has nothing to do with the amount per mile of the bridges and culverts?

A. No, sir.

Q. Then what is it that makes the price for bridges and culverts in your table under D to L just double what it is under A, B and C?

A. The class of the mile; that is, the character of the bridges and culverts on that mile.

Q. What is there in your table here to show that the class

of the bridges and culverts on those miles is different than the miles on A, B and C?

A. There is nothing.

Q. What information had you that the class of bridges and culverts was different?

A. Because we know that in the lighter types of construction we use a cheaper class of bridges and culverts, and to arrive at this value per mile we have prorated the cost of that a little over eight million dollars in the proportions I have given you. I don't claim that those are exact for any mile.

Q. You say that they are light construction. Let us see. Under column B we have $5,060 a mile for this grading; under column D we have $3,222?

A. Yes, sir.

Q. And yet you have, under column B, $1,015 for bridges and culverts, and under column D, $2,030.

A. Yes, sir; we might have, on such a line as that, an increased quantity of grading and a cheaper class of bridges and culverts.

Q. You might have, yes.

A. And they do have; not only might but do.

Q. What I want to get at is this, what there is in the condition set forth on your table here which enables you to say that under D you should have $2,030 for bridges and culverts and under B, (which is a more expensive construction) for grading, $1,015.

A. Simply because the grading might be a great deal more on a certain line, and the bridges of the cheaper class, and we had a mile of road worked out under those conditions, and in our examination, if the grading fitted that condition, we put it down as that class.

Q. That is true, but take the column D and the column B and the upper part of your exhibit of tables, what is there in that column D, when applied to the items under the head Class,

which shows that it is a heavier grading and would call for a better type of bridges and culverts than under column B?

A. It don't show it, it is the reverse, the bridging is lighter under B than it is under D,—one-half.

Q. Perhaps I misspoke myself in the question.

A. It is not a heavier grading, it is less grading and heavier bridging.

Q. D?

A. D is less grading and heavier bridging than B is.

Q. But what is it in that that shows why it calls for heavier grading?

A. Nothing at all.

Q. Then in making your estimate, how would you know when to include the $1,015, and when to include the $2,030?

A. In going over the line we would simply use our judgment as to the class of road that it covered.

Q. Then you simply make up your mind whether the road ought to take $2,030 per mile for bridges and culverts or $1,015 per mile of road?

A. Each mile of road as we passed over it we passed upon that question.

Q. And you might, for instance, then, in passing over a line, conclude, for instance, that a particular mile would call for $2,623 for grading, under head A, and $2,030 for bridging, under D; is that right?

A. Yes, sir; and sometimes we combined the two, took half of each. If we found the grading came under class A, generally speaking, all the way through, and that the bridging or other items might be heavier on B, we would combine A and B as the cost for that mile.

Mr. HOW: You did do that in many cases, did you not?

WITNESS: The estimate shows a combination of classes to arrive at the cost per mile of many miles. I call attention to the first page of Exhibit 25—Berry.

Q. Let me see if I understand the way you would get at this. In making up your values on this table, suppose you struck a mile of road where the grading would come under A, in getting at the value of a mile of road where the grading would be under A, the bridging under D, the ties under B, the rails under E, the track-fastenings under C, the frogs and switches under D, the track laying and surfacing under E and the other items under D, how would you get at the value of the road?

A. A great many of those items are the same, without regard to where the mile is located, and we would simply use our judgment of combination of either single class, or combination of the same, to represent the cost of the mile of road.

Q. Then using this as a sort of a guide, you would make a mental estimate of what you thought it ought to be?

A. Yes, sir.

Q. Without reference to that table?

A. No, sir, the tables were referred to constantly. You must bear in mind that after working over these tables for a long time you become saturated with it and as you ride over the road you readily use your judgment as to which class it might come under or which combination of classes.

Q. Yes, but we have here twelve classes.

A. Yes, sir.

Q. And you would take into account, in those twelve classes, fifteen sets of items, besides a number of subdivisions of those classes. Do you mean to say that, having made up this table and become generally familiar with it, as you went through you could make up your mind what this mile of track ought to be and what that and the other would be?

A. Yes, sir.

Q. And you didn't make any separate combination of tables or attempt to?

A. No, sir, not while we were travelling.

Q. Did you make a notation of the classes of the various miles traveled and then sit down and figure them out according to your tables afterwards?

A. Yes, sir.

Q. Are those notations such as you have made in the book you have referred to?

A. Yes, sir.

Q. May we see one of those? Just show us, for example, one of your combination miles there.

Witness hands note book referred to to Mr. Durment.

Q. We have here on this book, on this page, "Cheney to Missoula." At the "67 mile" we have, under the head Class, "FG." Now, what figures would you use then to make up your values?

A. Half of F and half of G.

Q. You would take the total of all the items that enter into a mile of road under F and the total of all the items that enter into the road under G and add them and then divide them by 2, would you?

A. Yes, sir.

Q. I notice in this note-book, from Cheney to Missoula, that under "17" and "18" each of them, it is marked "one-half H." What does that mean?

It refers to the class; you would go to that and you would take half of it.

Q. Then it would be one-half of the class?

A. Yes, sir.

Q. You would simply divide the total of that by 2 to get that mile?

A. Yes, sir.

Q. Then, so far as I have noticed here, there seem to be no cases in which, for instance, you would find that the grading should be under one class, the bridging and culverts under another, the frogs and switches under another, the track-laying

and surfacing under another?

A. No, sir.

Q. You seem not to have hit any combination other than 2, so far as I can find and see here, on any one mile.

A. That is all there is on the whole road.

Q. And in that case, where you would make a combination of two, you would add the totals under both classes and divide by two?

A. Yes, sir. Now, may I add, for your general information, (which will help out very much) that there are a great many of these items that remained absolutely the same per mile along the line of the road so that you don't have to carry in your mind all those items at all.

Q. Your exhibit shows that to be a fact?

A. Yes, sir, my exhibit shows that to be a fact; so that you don't have to carry in your mind all those items at all. The principal thing that you are looking out for is the classification of your material and the approximate quantities of yards per mile; that is what you are looking after, and you are knowing, besides that, the question of whether it is ballasted, whether it is fenced and whether there is clearing and grubbing.

Q. That is just what I thought,—that the principal thing you were looking after was the material and the classification of material, and that the matter of bridges had nothing at all to do with the grading or the ballasting or the excavation.

A. No, sir.

Q. And, therefore, there is nothing in the information contained under the columns A, B, C, D, and so on, which would in any way indicate what ought to be the amount for bridging?

A. No, sir.

Q. And in going over the road, you say the principal things you kept in mind and looked out for, were the materials, the classification and the cost of them?

A. Except that we did pay attention to the bridging as we

went along.

Q. Yes, you paid attention to the bridges, but you say that when you came to make your final estimate you didn't estimate the bridges separately, at all, but you simply classified as a whole, including bridges and all, and divided by 2?

A. That is, those that we did not locate definitely, yes, sir.

Q. Was that rule of yours which you have pursued as to the work you did for different classes the regular rule you followed in making up your estimate?

A. Yes, sir.

Q. Was that true in every case?

A. Yes, sir.

Q. Then the result was, I take it, that in the case of every mile of road you included some amount for bridges?

A. Yes, sir.

Q. In making your estimates.

A. Yes, sir.

Q. Whether there was a bridge in that mile of road or not?

A. Yes, sir.

Q. And if there were a dozen bridges in there, which would cost three times the amount of this table here, it went in at the amount of the table just the same?

A. Yes, sir.

Q. And to illustrate—I don't know that it is the fact but it would be physically possible, perhaps—that in one state there might be four times the number of bridges in the same length of road as in another state, and yet in your estimate of those portions they would each contain the same amount of bridges?

A. Yes, sir.

Q. I notice here under the head of Bridges and Culverts, for double-track you have adopted the unit for each mile, under each class, of $3,248.

A. Yes, sir.

Q. How did you come to take that figure?

A. An arbitrary amount.

Q. No reason for it, I suppose?

A. Yes, there is some reason. A culvert for a double-track is not twice as long as it is for a single-track. It has a direct relation to it, increases simply by the width between the tracks, that is all it increases. A bridge might be twice as much, some bridges, but the culverts would not be, and that was an arbitrary amount that we took for double-track construction.

Q. I suppose that you took the others and distributed them —that is, for the single-tracks—and then divided what was left between the double-tracks?

A. No, we didn't.

Q. How did you arrive at it?

A. It was an arbitrary amount to divide, that amount per mile of track, and having direct bearing as follows, that the branch-line bridging is cheaper than the main-line; or, I will put it this way, that in some miles of track the bridging costs more than others and in the double-track it costs more than the single.

Q. I noticed, this morning, in testifying with reference to rails, you used the expression, I think it was, "taking the Northern Pacific custom or formula" something of that sort.

A. For what?

Q. For steel rails.

A. I didn't use the word formula. If I said anything I said taking the Northern Pacific record of rails used both for main-line and sidings.

Q. No, "taking Northern Pacific custom"—that was it.

A. For what?

Q. Well, you said on rails, "according to Northern Pacific custom" you found this table was made up, you found rails under these various columns to be as there stated. What did you mean by that term?

A. I meant to say that the Northern Pacific uses a certain

kind of rail, both for its main tracks and sidings, and in calculating the amount, both in tons and dollars and cents, we took the rail that they use.

Q. Then I suppose that, for instance, the sixty-two-pound rail, 113 tons—

A. Yes, sir.

Q. —you meant you took the size rail or the weight rail that they were accustomed to use on various classes of work?

A. Yes, sir.

Q. And that would give you, a sixty-two pound rail for the single track, 113 tons?

A. Yes, sir.

Q. I find, however, under heading D, a 62-pound rail, 29 tons. Now what is the difference between the 62-pound rail, 113 tons, and the 62-pound rail, 29 tons?

A. Simply because there were more sidings in one than in the other, and that ratio, shown at the top of the exhibit, indicates whether it is .15 or .3.

Adjourned until Wednesday morning, September 16, 1908.

Federal Building, Wednesday, September 16, 1908. The hearing was resumed at 10 o'clock, a. m.

JOHN B. BERRY,

recalled on behalf of Complainant for further cross-examination, testified:

By Mr. DURMENT:

Q. I want to understand, somewhat better than I do, and more in detail, this Exhibit 24 and the use you made of it. Looking at that, in connection with your Exhibit 25, as I understand it the upper half of the page, the column under each letter, taken in connection with the items under the head "Class," indicates what is, in a general way, a particular class or grade

of road or track, and that the remainder of that column gives, in more or less detail, the value or cost of certain portions of the work needed in constructing a road of that class, and that the final amount, at the bottom, is the amount it would cost per mile to construct a road of the class indicated by that column; is that right?

A. Yes, sir.

Q. And so in your examination of this road you have determined how many miles of each class of road, A, B, C, D or E, and multiplied that by the total cost as you have it shown by this total; or, where you have miles of road of two different classes, you have added the totals of those two columns together and divided by 2 and taken that to arrive at your value of that part of the road; is that right?

A. Yes, sir. Let me bring out very clearly, that in class A, on the upper half of the sheet, there might be a mile which was all fill, there might be a mile which was part fill and part cut, you might get a mile that was part fill and some solid rock in it, some loose rock in it, or both; and that wherever you have a mile that fits that condition the price named below is the amount it would take to build that mile. It might not be one thing or another. So that in each class you get a number of different types of grading that would all cost the same amount in dollars and cents.

Q. Referring at this time to this Exhibit 24, under the head Class, Proportional Length of Siding, I find, under A, B and C, ".15" in figures, and under the others ".3," which you said yesterday represented the proportion of a mile of siding which would be included in the value in this table of each mile of main track as I remember it; that is right, is it?

A. That is right.

Q. Where did you get your information, in making up this table, as to how much siding there was on the Northern Pacific System?

A. From their annual report and the records of the chief engineer's office.

Q. That is, you assumed, of course, that the amounts given in the annual report and the records were correct?

A. Yes, sir.

Q. You didn't make any personal investigation of it?

A. No, sir.

Mr. HOW: Not prior to making this plan.

Mr. DURMENT: I mean in making this plan; we are talking about the plan now and these tables.

The MASTER: That is, the plan was made on an assumption, as I understand it?

Mr. DURMENT: Yes, on the assumption that those figures given by their reports and records were correct.

The MASTER: And then he goes to the records and finds out how many miles of siding there may be, or how it runs?

Mr. HOW: No; he had the records of the engineer's office, as well as their annual report, before he made this plan, and then his inspection verified that.

Mr. DURMENT: Well, as to whether his inspection verified it or not isn't claimed, but he made up his table—

Mr. HOW: Well, ask him and see whether I am right or not.

Mr. DURMENT: I will, when I get around to it, but now isn't the time, or place. But in making up his table he took the information which was contained in their reports and engineer's records as correct. That is as I understood him.

WITNESS: I believe I added, yesterday, that on a great many railroads the proportion of sidetracks to main line was about one-third, and I stated, further in detail, of other roads that seemed to have that same proportion, so that it would seem as if the Northern Pacific were carrying out good practice, as shown on other railroads, of having about one-third.

Q. Well, the point I make is this: That so far as this table was made up and so far as it was made up upon information

as to the Northern Pacific, your information as to the sidings consisted in an assumption that their records were correct upon that point.

A. Yes, sir.

Q. Now, you will explain again, briefly, just what the operation or theory upon which you figured out there would be .15 of a mile siding to each mile of main track, under A, B and C, and .3 of a mile of siding, to each mile of main track under the other classes?

A. After going over the line, finding out the mileage at all these important stations, 51 of them—

Q. You mean after going over the records, I suppose?

A. No, sir, I said over the line.

Q. But I am asking you—

Mr. HOW: Oh, let him answer the question.

Mr. DURMENT: I will put my questions as I want to.

Mr. HOW: I submit that he ought to be allowed to answer the question.

The MASTER: Well, I think it is proper for him to answer the question that is asked, and I think Mr. Durment was about to call his attention—

Mr. DURMENT: To the fact that he has testified he made up this table before he ever went over the line.

The MASTER: Yes, and we want to find out whether this was taken into consideration before he went over the line; I suppose that is the point.

WITNESS: No, you are mistaken, you haven't followed my testimony. I stated, yesterday, that before I went over the line, I made up a table as a guide, of the proportion of side-track mileage to each mile of line that was considered in ordinary practice; that while on the line I saw that that amount was too low and I corrected it on the line. When I got the side-track mileage of all these important stations which had more

sidetrack mileage than the ordinary amount, I found out from the station plats how much there was on each place, deducted that from the total, and then found that my ratio that I had used on the trip was not large enough yet, as I had a certain number of stations on main line and a certain number on branches, and I prorated that amount of mileage between the main lines and branches in that ratio, for it bears about that ratio, taking the statistics from the time-tables, that amount of sidetracks at each station, and I corrected this statement after I got in here and gave the figures that you see there.

Q. Oh, then this Exhibit 24 of tables is not the tables you had and used when you made your inspection?

A. With reference to sidings, no.

Q. And all your change—

A. Can I answer that?

Q. No, you answer my question, please.

A. Hold on a minute.

Q. Then with reference to this matter of sidings, which you have changed in your plan of tables after you made your inspection, did it involve any change in the total cost per mile of the grading?

A. Yes, sir.

Q. It did?

A. Yes, sir.

Q. Then this table Exhibit 24 is not the table which you used in making your inspection but is the table which you corrected after making it?

A. Do you refer to the whole report?

Q. Yes.

A. You will have to divide it. The inspection had nothing at all to do with the lower part of it, in value, not a bit. Everything was related and the books show as to the class that it came in as to the character of the road.

Q. Did you before you went out on your inspection and

when you first made up your exhibit of tables, Exhibit 24, also make your figures showing the value per mile of each line under that class?

A. Yes, sir; I never used the bottom part of it at all.

Q. Well, I think you misunderstood my question.

A. No, I didn't. I said I used the upper half and not the lower half at all.

Q. Did you make up the upper half as a part of the tables before you made your inspection?

A. Yes, sir.

Q. You did?

A. Yes, sir.

Q. So that in "saturating" your mind, as you said you did yesterday with the information of this table before you went out over the line, you at least had your mind filled with a different figure for proportional length of siding and a different total amount per mile than is shown on this Exhibit 24 as finally corrected and put in evidence?

A. No, sir, we didn't have in mind, for one minute, at any time on the trip, the lower half of that table, at all, as to value.

Q. You didn't consider that at all?

A. Not at all; and to still further corroborate that, we had a lot of items in that lower half that I cut out entirely. To illustrate, ballasting: I had a prorate per mile on that on the statistics. The books show you that we checked the ballast item on every mile we went over, and when I got in I cut it out of the lower half entirely and entered it in the sheet as so many miles of ballast on main line and so many miles on branches and so many miles on sidings, according to our inspection report.

Q. But you did use the lower part of this table after you had made your inspection in making up your figures?

A. Not until we had corrected it according to that statement.

Q. I mean as it stands now.

A. Yes, sir.

Q. And that was a different table, in some respects, with different amounts, from that which you had figured out before you made your inspection?

A. Yes, sir.

Q. Now, how much difference, in the total amount, was there in the tables, as you originally made them out, and as they stand now, cost per mile of each class of this road here?

A. I can't tell you.

Q. You can't even approximate it?

A. Yes, it runs as high as ten thousand dollars a mile in some respects.

Q. The difference?

A. Yes, sir.

Q. Between now and then?

A. Yes, sir; that is, so far as the values are concerned, which we made no use of whatever on the trip.

Q. What was that difference due to? Was that difference in value per mile of these different classes due to the fact that when you came to correct your original tables you made changes in the upper half of the sheet, or was it due to the fact that you took different values or prices to make your computations on, or both?

A. No, sir.

Q. What was it due to?

A. In the first place, the condition of the lower half of the sheet is by cutting out a lot of items that we got specific and detailed information upon. That was the biggest item. Second, there was never any difference in the unit prices of the work from the very beginning to the end. We are using the same prices that we did in the Spokane rate case, that we had on this line of road, and as the estimate was finally made up, there were some slight variations or corrections, as I have explained

to you about the sidetracks, but at every place where they seemed to be an excess of that, as we passed over it attention was called, and that was taken into consideration, even with the variation in sidings.

Q. Did the amounts which were given as the cost per mile of each class of road on Exhibit 24, as they were when originally made up and before you made your inspection, prove greater or less than the amounts for the cost per mile of road of the same class as shown on Exhibit 24 as corrected?

A. In every case more.

Q. That is, in the original?

A Yes, sir.

Q. You cut them down?

A. You will have to explain what "cutting down" means.

Q. In every case, then, your table 24, as originally prepared, gave a greater cost per mile for each class of road than is given on your Exhibit 24 as corrected?

A. Yes, sir.

Mr. HOW: It included more items, didn't it?

WITNESS: The original included a great many items that were handled in a different way.

Q. Well, what do you mean by "handled in a different way."

A. I explained to you the ballast I had prorated.

Q. They were in the road, weren't they, though, just the same?

A. No, but I had prorated per mile for ballast included in the lower half of that sheet, and it is cut out entirely now.

Q. And it doesn't appear in the table in column "A" there; that ballast does not appear in the total, in the 11,696 at all?

A. No, sir, nor in any other class.

Q. I suppose it isn't in the road, then?

A. Yes, it is.

Q. It is?

A. Yes, sir.

Q. Well, why did you cut it out if it is in the road?

A. Simply because I wanted to remove the question of a prorate per mile of railroad wherever it was possible to do it, and I did, from the inspection, find out where that gravel was, and I made a special statement of the ballasting on the whole road, which is shown in a separate item.

Mr. HOW: And shown in Exhibit No. 25?

WITNESS: That is right.

Mr. HOW: Page 2?

WITNESS: Yes, sir.

Q. You didn't include the cost of the ballasting, for instance, in the cost per mile, but made that a lump sum for the entire System and added it later?

A. Yes, sir. By "lump sum" please understand it was the estimated number of miles multiplied by the price per mile.

Q. I will say an aggregate, then, instead of lump.

A. Yes, sir.

Q. I understood you to say, also, that that total cost per mile of road, as to each class which was contained in your original tables made before the inspection, was also changed and corrected in this Ex. 24 because of the difference in the amount or length of siding per mile which you found should be made after an inspection. Did that increase or decrease the aggregate cost per mile of the roads under any of these classes, or how was it?

A. It increased it.

Q. It increased it in all of them?

A. Yes, sir.

Q. As I understand it, the next four classes, in bank-slope 1½ to 1, excavation, earth-slope 1½ to 1, excavation, loose rock, slope 1½ to 1, excavation solid rock ½ to 1, with the figures carried out under the letters for columns, simply give dimensions?

A. That is all; dimensions and classification.

Q. Well, so far as they are classified, the figures of dimensions make the classification, don't they?

A. Oh, no; no sir. Oh, no.

Q. Well, now, let us understand; just how do those four items, by themselves, indicate classification?

A. They don't indicate classification. Classification is below.

Q. Well, that is what I thought.

A. The four items of figures give the dimensions of the roadbed only.

Q. Only,—that is what I thought. Now, we find the next there, "Average fill for distance, two feet for two-thirds of a mile;" is that right, under "A"?

A. Yes, sir.

Q. I suppose that means that, for two-thirds of a mile, there would be an average fill of two feet?

A. That is right.

Q. And that not only gives dimensions but does have a bearing on classification?

A. Not at all.

Q. It doesn't have?

A. Not a bit.

Q. That is simply dimensions?

A. That is all.

Q. Now, take the second after that, "Excavation, one-third of a mile," that means as I understand it, that for a third of that mile, or of an average mile, there would be an excavation?

A. Yes, sir.

Q. What under that head "Class" there shows the dimensions of the excavation?

A. Read the items just ahead there, the width of roadbed, 16 feet, and giving the slopes. Read the items in which the embankment is 12 feet wide, the excavations are 16 feet wide, with a notation of the slopes.

Q. Well, then the excavations 16 feet wide with the slopes would indicate the dimensions of that cut?

A. Yes, sir.

Q. When you come to figure the total quantity of cubic yards there, which is just above this one-third mile of excavation, does that include the cubic yards in the cuts as well as in the fills?

A. No, sir.

Q. What does it include?

A. It includes simply the embankment, because the embankment quantities are in excess; one-third of a mile of excavation would go into the fills and you would not pay for it both ways unless you so specified.

Q. So that this 4,881 cubic yards, then, really is the total number of cubic yards for a fill two-thirds of a mile long, two feet high, with a roadbed twelve feet wide, and a slope one and one-half to one, plus ten per cent extra for additional gradings?

A. Well, the additional grading is largely shrinkage.

Q. Well, whatever—

A. Yes, sir. I might bring out one point that I don't think you know about.

Q. Well, there are several I don't know about.

A. If you have got a fill of 100 yards and a cut of 100 yards, the 100 yards of cut won't make the fill; it shrinks; and the shrinkage is in direct proportion to the amount of material you put into it. The result of it is that this ten per cent is not a fictitious value at all. Engineering books will tell you what the shrinkage of material is. And when you come to put that excavation in the fills you have got to allow for the additional quantity that is figured on an embankment basis to take care of the shrinkage in it.

Q. But, ordinarily, when you let a contract to do grading, which includes cuts and fills, at so much per cubic yard, with

your contractor, do you allow your contractor ten per cent excess over the figures you make?

A. No, you don't understand it. In the first place, this quantity is figured out on an embankment. That embankment has shrunk say ten per cent. When the contractor is paid for his excavation, he excavates the total number of yards to make that fill, which includes the shrinkage besides, but he has to get that material, either from a borrow-pit on the side or a cut, and he gets paid for the number of cubic yards in the fill without regard to what the shrinkage or fill is.

Q. But he gets paid for the number of cubic yards put in?

A. Yes, sir; but the calculations are made on an embankment basis.

Q. And an embankment basis—

A. Ask your engineer—

Q. No, I will get it straight.

A. —if I don't make it clear to you.

The MASTER: Made on a fill basis and not on a cut basis?

WITNESS: Yes, sir. Not at all, it says there positively—

Q. Here is what I have in mind. You said, and I understand that is true, that there is a shrinkage in taking from a cut and putting into a fill; that is, that you will take out more cubic yards of earth from a cut than it will measure in the fill when it is there?

A. That is right. That is, now, bear in mind, that the calculated quantities are all fill.

Q. That is what I want to get at. Now, here, in taking this 4,881, you calculate that upon the basis of the fill?

A. Yes, sir, it says so, "Average fill for distance, two feet for two-thirds of a mile."

Q. But when you pay a contractor do you pay him embankment measure or cut measure?

A. Pay him excavation, unless otherwise specified.

Q. And, for that reason, the road pays for the shrinkage

in the cut?

A. Yes, sir, it pays for the shrinkage in the fill.

Q. Well, the shrinkage in the fill under what there was in the cut taken out?

A. Yes, sir.

Q. Now, in paying for grading a road, where, for instance, it would run two-thirds of a mile fill and a third of a mile cut, would you pay the same price per cubic yard for taking the earth out of the cut which would be thrown into the fill as you would pay for filling?

A. It depends entirely on the terms of the contract.

Q. Well, what is ordinarily the case?

A. Well, the ordinary method is as you stated, that the contractor is paid for the number of cubic yards of excavation, without regard to where he gets it or where he puts it.

Q. But in many cases it is otherwise, isn't it?

A. There are other cases, other conditions.

Q. And in those instances, what is the difference in the price, ordinarily, between the work per cubic yard of excavation and the work per cubic yard of fill—any?

A. Yes, very decided.

Q. Well?

A. If you contract with a contractor to pay him what is usually termed "both ways," the total number of cubic yards in the cut, plus the total number of yards in the fill, you may have a haul proposition in it, but usually not. And that means there is no overhaul, and the price is very materially less. I have frequently, in fact almost always, asked contractors to bid both ways, on a cost per cubic yard plus a price for overhaul, and a pay-both-ways proposition, which I have just explained. My experience is this, that a sub-contractor does not know how to calculate haul and it is his bugbear, and if you say to him there are so many yards in that fill and so many yards in that cut, he knows what he is going to be paid for, because he can

multiply the yards by the price, and I have invariably found that I could let a contract for a less price gross, by paying both ways, in a country where you can waste and borrow, than I could let it at a price per cubic yard for excavation plus an overhaul; so that it is not iron-clad, nor the length of overhaul is not ironclad, but it is a question of taking every case by itself to see how you can get it done the best and cheapest.

Q. But as I understand, your experience has been that, ordinarily, you can get it done cheaper where there is no overhaul for them to consider?

A. Bear in mind I said in certain localities. Let me illustrate a case: If you had to buy extra land, in a country where the land was high, to waste your cuts and borrow for your fills, it might not pay you; then it is better for you to haul your material. But where it is an open country and the land is cheap, invariably you can build the road cheaper by letting him waste the cuts or haul as he chooses and borrow from the sides to make the fills. But it necessitates, in many cases, buying additional land for it.

Q. But, ordinarily, if the road had a right-of-way of 400 feet and in an unsettled country, it would not involve buying much land, would it, or expensive land?

A. No, sir, very little, except in a mountain country like the Northern Pacific runs through from the Rocky mountains west.

Q. Now, as I understand it, in making up this table Ex. 24, and taking the number of cubic yards and the cost of doing the work and the like, you have not followed the latter method you spoke of, but you have included a sum for overhaul?

A. Yes, sir.

Q. Of ten cents a yard?

A. No.

Q. Well, that ten cents a cubic yard was for overhaul and the transportation?

A. Yes, sir.

Q. But if you were going to let it under the first method, that would be excluded?

A. What would be?

Q. That ten cents or a part of it.

A. No; oh, no. The sum of the two might equal the thirty cents and would probably do it.

Q. The sum of what two?

A. The sum of pay-both-ways would equal the price; it might be a little less.

Q. But you said, just a minute ago, that you could build a road much cheaper under that plan.

A. No, sir, I didn't say that.

Q. Under circumstances?

A. No, I didn't say much cheaper. I said I had frequently asked for bids and found I could do it cheaper and it could be done for less money.

Q. The point I make on this, then, is that you have assumed here, in arriving at these tables, that a plan was to be followed which wouldn't give it for the least money.

A. No, I didn't say that, and I don't think so, either.

Q. You don't think so?

A. No, sir.

Q. Well, why don't you think so? You say you found that, under the method different from this you adopted, you found, at times, you could do it cheaper?

A. I found times I could do it, but I don't know that I could do it in the Northern Pacific case at all.

Q. You don't know that you could do it in the Northern Pacific case at all?

A. No, sir.

Q. Your knowledge of the ground and the situation is such that you can't say whether you could do it there or not?

A. No, sir, that is right. In the mountain country, un-

doubtedly, we would have to pay for hauling the cuts and depositing it in the fills.

Q. But there is a very large proportion of the Northern Pacific System that is not in the mountains at all.

A. Yes, sir, that is true. But where you are doing such work as the Northern Pacific on the prairies of Minnesota, it would be impossible, with such high fills, to borrow the material from the sides; the result is that they are hauling it long distances to make the fills today.

Q. Now, I notice here that the next item in the classification is all earth under "A" and classifications Loose Rock and Solid Rock have dashes; what does that indicate as to that class?

A. It means that there is supposed to be no rock of any kind on that mile.

Q. Well, now, we take here the next, "Embankment in feet 1.4," what does that mean?

A. It means that if you take 4,881 yards and multiply it by the price per yard of thirty cents for earth, it would be equal to an embankment over the whole mile 1.4 feet deep multiplied by 30 cents.

Q. That would be the same thing, then, as a fill for two-thirds of a mile, two feet high, in the dimensions of the roadbed indicated above in that column, plus ten per cent of that amount, would it?

A. I don't think you have brought that question out clearly.

Q. Well, perhaps I didn't, but I think you know what I have in mind.

A. Yes, I do; I think I know.

Q. Maybe you can make it clearer in your answer.

A. A fill for two-thirds of a mile two feet deep.

Q. 12 feet wide?

A. 12 feet wide, that slope has 4,881 yards in it.

Q. When you add ten per cent?

A. With the ten per cent added. In all cases you assume

ten per cent; that the one-third mile of excavation is less than the two-thirds of a mile of embankment, and hence you pay for it plus your overhaul, and then if you had a fill for one mile in length, twelve foot roadbed, slopes as indicated, it would be as an equivalent to 1.4 feet deep and give you the same number of yards, 4,881.

Q. Now, then, will you please explain this excavation of earth in feet?

A. If you had a cut a mile long and 1 foot deep, it would have 4,881 yards in it.

Q. How is that?

A. If you had a cut a mile long and one foot deep you would have 4,881 yards in it. That includes ten per cent added to the quantities.

Q. And this "One-third E, one-third LR, one-third SR, in feet .5;" what does that mean?

A. If you had a mile of road, and if you estimated one-third of it was earth and one-third loose rock and one-third solid rock and it was .5 of a foot deep, it would be equivalent, in dollars and cents, to 4,881 yards multiplied by the price per yard for earth.

Q. I see. If you had a cut a mile long and .5 of a foot deep, one-third of which was earth, one-third of which was loose rock, one-third of which was solid rock, the price for making the excavation at the figures you used, or prices you used, would be the same cost as to excavate 4,881 yards at the price you used for earth?

A. Yes, sir.

Q. And the next item excavation one-half earth, "One-fourth LR, one-fourth SR," is the same thing except the different proportions of earth, loose rock and solid rock?

A. And depth.

Q. Now, as to all solid rock and all loose rock?

A. If it was all solid rock per mile, the depth would be .4 as

equal to 4,881 yards, multiplied by the price per yard for earth.

Q. And all loose rock?

A. It would be a cut .6 of a foot deep under the same conditions.

Q. Now, I notice, in the lower half of the page, in giving the values, you treat all the excavations and all the fills simply under the head "Grading," making no distinction between earth and loose rock or solid rock.

A. There is no difference, absolutely none. If you go over the line and decide the character of the mile of any of those features under head "A", it amounts to the same in dollars and cents.

Q. That is to say, then, under class "A" you might have two-thirds of a mile fill and one-third of a mile excavation of dimensions, roadbed and fill and cut, shown under letter "A"?

A. Yes, sir.

Q. And the cost per mile of that road would be as shown in the lower half of that column?

A. For the grading, yes, sir.

Q. For the grading?

A. Yes, sir.

Q. You might also have that two-thirds of a mile solid rock of a certain depth?

A. You might, yes.

Q. And if that was only—

A. Hold on a minute; that is right.

Q. —.4 of a foot it would be the same?

A. .5 of a foot.

Q. For solid rock?

A. No, you said two-thirds. There is no two-thirds solid rock in either of those items that you are following.

Q. But the entire mile might be solid rock?

A. Yes, sir.

Q. And then, if it was more than .4 of a foot, it would go

into some other class?

A. Yes, sir, .4 of a foot deep.

Q. If there were two-thirds solid rock and the rest loose rock, where would that throw it, into another class, or would it still take the same amount for grading as you have under letter "A"?

A. No, that would throw that into another class.

Q. What class would that be?

A. That would depend on our judgment as to how much there was of it.

Q. Well, we will assume here that it was two-thirds solid rock and one-third loose rock; now, in this table where would it go?

A. We might have a combination of A and B to produce that result; one would be .7 and the other .4, indicating a greater quantity of solid rock, and we would put it together, A and B, if that was the condition of grading.

Q. Suppose you had a mile where it was a fourth earth, a half solid rock and a fourth loose rock, where would you class that on your tables?

Mr. HOW: What depth?

WITNESS: What depth?

Mr. HOW: Let me suggest 3,000 feet earth and one million feet—

Q. Now, in the other question you didn't know the depth and we didn't have to give you the depth.

A. We would go to one of these other classes for it.

Q. I know you would.

A. And our experience and judgment, as we went along, would define exactly which class that would go to.

Q. Now, I say what class would you put it in?

A. Will you state the question again?

Question read.

A. Well, it would depend on the depth entirely. We might

make a classification of A, B and C, if necessary; we might make it B and C.

Q. Suppose we say then that the average depth of earth was two feet, the average depth of loose rock three feet and of solid rock a foot and a half.

A. Put it in class "B". In other words, if there is a condition that don't fit class "A" in either depth or classification, we move it up to the next higher class or a higher class.

Q. And how do you determine which higher class to move it to?

A. Our experience and judgment.

Q. But there isn't anything in this table from which an inexperienced man could take the table and take those dimensions and quantities which I have mentioned, and say in which class it should run?

A. Why, of course not; I don't expect you could. A fellow has got to be a pretty good man if he can be a first-class doctor, a good minister, a good lawyer and a good engineer.

Q. The point I want to make clear in the record, Mr. Berry, is this, that these tables which you have made up here are merely for the guidance of you in the exercise of your judgment in a general way; that they are not so accurate, not so comprehensive, that an inexperienced man, given the tables and the various dimensions and quantities, can say in which class it ought to go.

A. That is true, because he has not seen the line, he has not seen the work.

Q. And that so far as we are concerned here, and so far as the Master is concerned, from all the information he can get from the tables and from your testimony, he has got to accept your results; he can't verify them?

A. No, sir.

Mr. HOW: Now, may I understand this? The purport of that is that you and I cannot take this table and go out and

tell what the Northern Pacific is worth?

Mr. DURMENT: No.

Mr. HOW: That is all you have shown, isn't it?

Mr. DURMENT: No, that isn't it; entirely different. I can understand that table, I can understand how it is made up, I can apply it to the particular quantities and the particular dimensions given in this table to any line of road, if I am given those quantities and dimensions and figure it out from what he has furnished me; but there are innumerable combinations and classes where the particular dimensions and quantities given here won't fit. Now, given those quantities and classes and dimensions, I can't figure it out because it is not a matter of mathematical calculation, but it is a matter of judgment and experience. Now, that is what I mean to say.

WITNESS: As to which class?

Q. As to which class it shall go into, or as to which classes shall be combined to make it.

Mr. HOW: I understand it is both.

Q. Well, that statement is correct as to this, isn't it?

A. Yes, sir.

Q. You would use this same table on any road in the same way, wouldn't you?

A. I think so, yes, sir.

Q. Of course, there might be some variation if you found that the length of siding was different per mile of road, that would make some difference?

A. Well, it would affect a number of items, too; as far as quantities are concerned I would use that table, practically so.

Q. I notice under the classes A, B, C, you have 62 pounds, 113 tons. That is for the rails. On the other classes you have 62 pounds, 29 tons; 75-pound rail, 118 tons; and, of course, in the double-tracks you just double 118 tons and make it 236. Now, what does the 62 pounds, 29 tons mean, under those

classes from "D" to "T" inclusive?

A. 62-pound rail used wholly in side tracks; 29 tons represents the tonnage of 62-pound rail in side tracks for .3 of a mile of road.

Q. And the 75-pound, 118 tons, represents the number of tons of 75-pound rail in a mile of main track?

A. Yes, sir.

Q. Now, following the lower part of this table, it is reasonably apparent from your explanation that your figure for the grading in each class was arrived at by taking the quantities as indicated in your table and multiplying them by the prices which you gave in your Ex. 26?

A. Yes, sir.

Q. And you explained, yesterday, how you arrived at your figure per mile for bridges, trestles and culverts. How did you get your information as to the number of ties per mile in the Northern Pacific?

A. The rule of the Northern Pacific.

Q. What was the rule and order of the Northern Pacific as to how many should be used?

A. They have a rule in regard to how many ties shall be laid per mile of main track, how many per mile of branches, and how many per mile of side-tracks.

Q. And as to the number of rails, you would know that, anyway?

A. Yes, sir.

Q. How did you get your information as to the track-fastenings and the frogs and switches per mile?

A. If you know how much rail there is you know how many track-fastenings there are.

Q. But I notice that it differs under different classes of road.

A. Well, that is true, but if you only use 2,600 ties to the mile you don't have as many to spike as if there were 3,000 ties. You might use a different type of fastening, too; you might use

an angle-bar in one case two feet long, in another case forty inches.

Q. Of course the track-laying and surfacing you get from your general knowledge of railroading?

A. Yes, sir. That is made up wholly from actual cost on other lines.

Q. That is, your estimate of what it would cost?

A. Yes, sir.

Q. You didn't make that up from the Northern Pacific figures?

A. Not at all.

Q. You were not given any information as to what they had paid for any of it?

A. No, sir; I didn't ask for it.

Q. Now, fencing right-of-way. Where did you get your information for that?

A. Took the cost of a mile on the Northern Pacific and added the cost of fencing, for which we have data of actual construction.

Q. I don't quite understand that, Mr. Berry.

A. If you build a good many miles of fencing you know how much the fencing material and labor is. The labor would be practically the same on any mile; the material may be different. Take the material at cost on the line of the Northern Pacific and add your labor cost to it.

Q. Where did you get your material cost?

A. Prices that are paid on the Northern Pacific road for fencing material, and we also know what barbed wire is worth, or any other type of fencing brought from outside.

Q. Did you have any information, in making up this table, as to how much of the right-of-way of the Northern Pacific was fenced, and the character of fencing used in the different parts of it?

A. Yes, sir, we got the amount and cost, as a check, from the

Northern Pacific, of what they had.

Q. You got the amount?

A. Yes, sir.

Q. And the cost?

A. Yes, sir.

Q. From the Northern Pacific?

A. Yes, sir.

Q. Is this $131 per mile for fencing right-of-way arrived at by taking the total cost of fencing which they gave you and apportioning it?

A. Yes, sir.

Q. Then your knowledge of the cost of material and of labor for fencing had nothing to do with the making of this table except to indicate to your mind whether or not the total amount of fencing the Northern Pacific had paid for was reasonable?

A. That is right.

Q. Now, can you tell us what was the total amount which the Northern Pacific Railway Company gave you as the cost of its fencing for right-of-way?

A. $759,450. You must bear in mind that all those items we are likely to change if we find there is more fence on the road than their record showed to that date.

Q. I suppose that they gave you, at the same time, the total number of miles of fencing on their line?

A. Yes, sir.

Q. Now then, in arriving at this figure $131, did you get it by dividing the total number of miles of fencing on their line into the total cost of fencing?

A. Yes, sir.

Q. Do you know how many miles of fencing they gave you as having cost $759,450?

A. 4,575 lineal miles.

Q. And this $131 here is a lineal mile, I suppose? I mean, is the cost per lineal mile.

A. Yes, sir.

Q. And I suppose this seven thousand and odd miles of railway given are lineal miles, too?

A. No; oh, no; that is sidings and spurs and everything of that kind.

Q. What is the lineal mileage of the Northern Pacific System?

A. Main line and branches, 5,785 miles. Let me quote for you: the original estimate showed 4,575 lineal miles of fence, at $166. I applied our own rule to it and reduced it to $131 a mile.

Q. What was your rule?

A. What the material cost on the Northern Pacific, plus the labor.

Q. That, then, was $131 a mile for 4,575 miles of track?

A. No, it is $131 a mile for 5,785 miles of track.

Q. Yes, but they gave you 4,575 lineal miles as having cost $759,450, you say?

A. That is right.

Q. That would be at the rate of what?

A. $657,835.

Q. No, you don't get my point. You say they gave you as the cost of fencing on 4,575 lineal miles of track $759,450?

A. Yes, sir.

Q. How much per mile was that cost of fencing?

A. $166 a mile.

Q. You say that applying the cost of labor and material as you had found it in your experience reduced that to $131?

A. I made it $131 a mile as an average for the whole road.

Q. Oh, for the whole road?

A. For equipment, yes.

Q. Then, as a matter of fact, you didn't do anything in the way of changing figures except to take their total cost which

they had given you for 4,575 lineal miles and divide it by 5,785, did you?

A. And change whatever was necessary if I thought their price was too high.

Q. Oh, did you make any change in the cost?

A. I will tell you that. If you multiply 5,785 miles by $131 you will find it amounts to $657,835, which we increased, the fencing cost the Northern Pacific Railroad Company.

Q. You increased or decreased it?

A. Increased it, over and above what they had paid.

Q. Well, they had it $759,450.

A. I should say, decreased it, by the difference between the two.

Q. My associate figures that if you divide $759,450 by 5,785 you get $131.

A. That is right.

Mr. O'BRIEN: You mean these figures of mine are right?.

WITNESS: I say I verify your figures.

Q. Then, as a matter of fact, you neither increased nor diminished the cost of their fencing?

A. Not at all.

Q. You simply took the figures they gave you as the value and divided by the lineal miles of their main track instead of the lineal miles of actually fenced right-of-way?

A. Yes, sir.

Q. And that gave you an average for the entire line, that you distributed the cost of fencing over the entire line, of $131?

A. Yes, sir.

Q. So that, as a matter of fact, there was no reduction by you either of road per mile or in actual cost of fencing?

A. No, sir.

Q. Now, take the next item, "Road-crossings, Cattle-guards and Signs." Where did you get your information upon which to make your figures of the cost per mile of road for that item?

A. On the assumption that there was about a road-crossing at every mile.

Q. I know your assumption, but I say where did you get your information, if any?

Mr. HOW: Just one minute. That letter will bring all these things out.

Mr. DURMENT: Well, I have the letter in mind during this whole examination; I have studied it since yesterday.

A. That is the basis of the whole thing. On a basis of one crossing per mile.

Q. Where did you get your information?

A. Just an arbitrary assumption.

Q. An arbitrary assumption?

A. That is all.

Q. You don't know, in fact, how many there were?

A. No, sir.

Q. And no information was furnished you by the Road as to the number of crossings?

A. No, sir.

Q. Now, take this next item, "Interlocking and Signal Apparatus." Where did you get your information as to the number of those per mile, or the information from which you made these figures?

A. From the Northern Pacific Road.

Q. What information did they give you as to that?

A. They gave me, my recollection is, a gross amount. They gave me two items: Interlocking, $123,555, and block signals, $44,307.

Q. And by the use of those figures how did you arrive at the $29 per mile for these various classes?

A. Divided the cost by the mileage.

Q. Then you simply took the figures they gave you as the cost and added them and divided them by the mileage?

A. Yes, sir.

Q. Now, what mileage of main track?

A. 5,785 miles of main line.

Q. That is main-track and sidings and switches?

A. No, sir; no, sir; no, sir; miles of main line, of main track.

Q. You made no change in their figures on that?

A. Not a bit, except, as we went along, I made notes of all the interlocking plants on the whole road.

Q. Do you mean you checked up every one?

A. I checked up every one and entered it on the books.

Q. And in the notes does it correspond with the number they gave you?

A. Well, I didn't have the number but I checked up with the prices and I was satisfied they had spent that amount of money.

Q. Well, do you know how many you checked up, can you tell us how many of them there were?

A. No.

Q. Will your notes show?

A. Yes.

Q. Would it be much trouble to—

A. Well, it would be a good deal of trouble, it would probably take me two or three hours.

Q. Do these interlocking and signal apparatuses, as shown in this Ex. 24, include all the interlocking and signal apparatus on the road, at terminals as well as other places?

A. At that time, yes, sir.

Q. And you simply have taken the total of all the interlocking and signal apparatus upon the line at terminals and yards as well as upon main lines outside?

A. Yes, sir.

Q. And prorated the cost of them?

A. Yes, sir.

Q. According to mileage?

A. Yes, sir.

Mr. HOW: At what time, Mr. Berry?

WITNESS: As of June 30, 1906.

Q. You didn't notice any difference when you made your inspection this summer?

A. Well, I could tell whether a plant has been built within two years or not, generally, by the characteristics of the plant itself and somewhat by the shape of the blades and the newness of the house. You know when you see an interlocking plant it is not always an indication as to who paid the bill. That is a matter of contract. Sometimes it is half-and-half to each company. The Northern Pacific books show the cost to them on the basis of the contracts.

Q. You took the cost as shown by their books?

A. Yes, sir.

Q. Now, next take "Stations, Buildings and Fixtures." Tell us where you got your information on which you arrived at that amount per mile.

A. Before starting out on the road, we assumed that the main track of all main lines had a station about every six miles, and the branches every seven miles. We figured out what is ordinarily placed at those stations, it might be a depot on a branch line, it might be smaller, a section-house, a tool-house, a bunk-house, small stockyards—what is usually designed at a certain station, as a ratio. Then when we went over the line we checked up all these big stations, found out what the cost of the station buildings and fixtures were on the big stations, we deducted that amount from the total cost as shown on the books of the Company and prorated it on the mile basis, and that amount was reduced per mile, as compared with the first sheet we made out, because of the large expense of the buildings at these other important stations.

Q. As I understand it, then, in making up Ex. 24, as it stood before you made your inspection, you assumed, outside

of terminals, a station each six miles of main track and each seven miles of branch track?

A. Yes, sir.

Q. And figured, in your own mind, about what a suitable plant ought to be worth, and took that as a total, and from that arrived, for the purpose of your tables, at a figure per mile that should be the cost of station buildings and fixtures; after you had gone over the line and checked up and made a valuation on important terminal buildings and deducted that from the book values as shown by the Northern Pacific, you found that your rate under these classes here was too high and therefore you deducted from the book value the value you gave the terminals?

A. No, not from the book value, we simply reduced the amount per mile.

Q. Oh, but to do that, to get the amount per mile, you took the difference between what you said the Northern Pacific gave you as the cost and what you had estimated the value of terminals and then prorated that by the miles of road?

A. Yes, sir.

Q. And that gave you a less figure than is now shown on this Ex. 24 as you had it?

A. Yes, sir. I will add, in addition, that as we went along the line of the road we had in mind always, and made notations, whether the stations were as close together as that and whether they had as many buildings as we assumed on the start.

Q. Now, as a matter of fact, Mr. Berry, in making up your Ex. 24 as to this item, in the first instance you got from the Northern Pacific the cost of their station buildings and fixtures and apportioned it to the per mile road by dividing by the miles of road, didn't you?

A. Yes, sir, checked up by our inspection as to whether—

Q. And you then did not, for the purpose of making that

table, examine the stations, nor did you fix the values of them, except to take the values as given by the Northern Pacific?

A. That is all.

Q. And subsequently you made a change in that by deducting from the values as given you by the Northern Pacific the appraised value of certain important terminals, and you carried that into your valuation of the road other than by the use of this table as to the terminals?

A. Yes, sir.

Q. Then, as a matter of fact, this valuation per mile of stations, buildings and fixtures is simply an apportionment per mile of road by you, of the cost of those stations to the Northern Pacific as they gave you the cost?

A. Checked up by us as to whether there were buildings there sufficient to meet that.

Q. That is, in running over the line?

A. Yes; and to show you that there was, according to our way of estimating, we reduced the rate per mile.

Q. But you reduced the rate per mile simply because, in the first instance, you prorated the entire cost including terminals and other things?

A. Oh, no, not at all.

Q. Didn't you?

A. Oh, my, no! In the first place, I assumed just the ordinary stations without taking into consideration terminals at all.

Q. I know, but when you did assume that, you still prorated the entire cost of the Northern Pacific, including terminals and other stations, didn't you, upon that basis?

A. Yes.

Q. So that the only reduction in the rate per mile that has been made by you is due to the fact that in your first tables you prorated the entire cost to the Northern Pacific of terminals and all per mile road?

A. Yes.

Q. In this table you take out the terminals and put them in by themselves in another way and prorate what is left of the cost of the road per mile?

A. I think I can bring that out clearly—

Q. Well, isn't that right?

A. No, not quite right. Here is a basis of per mile of railroad which we made up after we returned: We calculated the total cost of the terminals, everything that is in it; got the length of them, and from the total cost of the terminals we deducted the proportional cost per mile of road from it and then prorated it in that way. In other words, this sheet of Ex. 24 in the cost of road represents 5,785 miles of railroad, and we had to keep that in that way and check it up, then we deducted this cost per mile of railroad from every one of these station terminals so as not to duplicate the matter.

Mr. HOW: You deducted the station terminals from the cost of road?

WITNESS: We deducted the cost per mile. Suppose it is two miles long through a station ground, from one end to the other of the station ground, and it is a class A railroad, and the terminals were $100,000 from one end to the other, everything that is in it, we deducted from that twice $11,696.

Mr. HOW: Oh, under the mileage?

WITNESS: Deducted the rate per mile through that terminal.

Mr. HOW: And included that mileage in the terminal charge?

WITNESS: Yes, sir; included the difference between the two in the terminal charge.

Q. That is, you arrived at your value of your terminals by fixing the value upon them as they stood, including the mileage within the terminal, and then deducted from that value the cost of the mileage?

A. That is right.

Q. Which left you the value of the terminal?

A. Left the value of the terminals exclusive of the mile basis. Is that understood, Mr. How?

Mr. How: I don't understand it.

Q. It is very clear to me what you have in mind but it does not quite reach what I want to get at. Can you tell me what they gave you, to start with, when you first made up Ex. 24, and before you made your inspection, as the entire cost of station buildings and fixtures?

A. They gave me as the original under station buildings and fixtures, $2,511,264. I want to add this much, that in all cases it does not represent the book account, but the chief engineer of the Northern Pacific gave me the number and kind of buildings. I also got from them the cost. If, in my opinion, the rate per square foot for those buildings should be more or less, I changed it as to what I thought it was worth, on the basis of the statement of the number and kind of buildings that they gave me, so that the total in this Ex. 24, for station buildings and fixtures, may not be the same as the Northern Pacific books, it may be more or less. I disagreed with Mr. Darling in quite a number of items as to the unit prices to be used, and he showed me what things cost, as they estimated them, and I showed him what we estimated them, and, as long as I was responsible for this estimate, I used my own figures.

Q. And did your figures increase or decrease?

A. That I cannot always tell you; I think both ways.

Q. You think both ways?

A. I think so, yes, sir.

Q. But when you came first to make up Ex. 24, you started out and made your distribution upon the basis of a total value for the System of stations, buildings and fixtures, of $2,511,264, did you?

A. Oh, no, not when I went over the road I didn't, but later on, when I took it up, I did.

Q. But before you went over the road—

A. I will tell you how I did that: I assumed a certain number of buildings at each station on the branch lines and the main lines, and the value of them as we build them, as the Rock Island builds them, or as the Union Pacific used to build them, and when I got through with checking up the terminals on the unit prices that I put for those buildings without regard to the book account of the Northern Pacific, the difference between that and my figures of the whole was prorated on a basis per mile. I cannot tell you, in every specific item, whether it is the book account of the Northern Pacific or not, because, as I explained a little while ago, I got the statement of the buildings and their character from them and I used my unit of prices for it, so that it may seem contradictory to you from what I said a little while ago.

Q. I want to know just exactly how you arrived at the figures which you put first into Ex. 24 for station buildings and fixtures and will leave the present one until later.

A. My own figures in the Spokane rate case of the station buildings and fixtures, without regard to the Northern Pacific book account at all, was $2,511,264. When I got through with this inspection—

Q. Now then, before you get to the inspection—you used that, then, in making up Ex. 24, first?

A. No, sir.

Q. Before you had made your inspection?

A. Not at all.

Q. It appears here that you made up Ex. 24 before you made your inspection and you included a certain amount per mile for station buildings and fixtures.

A. Yes, sir.

Q. Subsequent to that, after your inspection, you changed that in ways.

A. Yes, sir.

Q. What I want to know now is just how you arrived at the

figure which you included in this Ex. 24, as it was before you made your inspection.

A. Well, I thought I made that clear—I will do it again, anyhow, Mr. Durment,—I assumed that, every six miles of main line, there was a station with its station buildings; on every seven miles of branch main line, there was a series of station buildings; on every twenty miles, there was a water station, and so on. Now, to get back to buildings, I took what I considered a proper lay-out, such as most roads use at all those stations, multiplied it by the price or actual cost, such as we put on the Union Pacific and the Navigation and Shortline in a similar case for that class of structure, and entered that on the sheet on a per mile basis, before we went over the road.

Q. Then you made your own calculation of the total amount for stations and fixtures by taking the number of stations, assuming one every six miles of main track and one every seven miles of branch-line?

A. Yes, sir.

Q. And then multiplied that by the cost, by what you estimated from your own information, as the cost of each station?

A. That is right.

Q. Do you know whether that gave you a greater sum or a less sum, in the aggregate, than you used in the Spokane rate case?

A. In the Spokane rate case—

Q. In the Spokane rate case you say you took $2,511,264 as the total?

A. Yes, sir.

Q. Do you know whether the total which you arrived at, as you testified you did for the original of this Ex. 24, was more than $2,511,264 or less?

A. I found, in deducting terminals, terminal station buildings and fixtures from the total cost that I gave in the Spokane rate case and dividing it by 5,785 miles, that the rate per mile

for station buildings and fixtures that I started out with, was higher than the actual facts in the case using the total for all the buildings.

Q. So when you had made your inspection and checked up and came to put this Ex. 24 in final shape, you found that if you deducted from the $2,511,264 which you had given as the total value in the Spokane rate case and prorated the difference according to the miles of road, the figures you had originally put in Ex. 24 were too high?

A. Yes, sir.

Q. And I suppose, then, that the figure which you got in making such prorate, was the one you placed in the Ex. 24 as it now stands.

A. Yes, sir.

Q. That $2,511,264 was the total value. Where did you get those total values, in the first instance?

A. I got the description of the buildings from the records of the Northern Pacific, and the character, and used my own unit prices, without regard to whether it was higher or lower, either in unit prices or gross amount, on the Northern Pacific books; and I will add, for your further information, that the Spokane rate case, nor the Northern Pacific books, so far as I did check them up, had nothing at all to do with making up this estimate.

Q. I simply wanted to find what, if any, change there was in the total figures on this inspection from what you had in the Spokane rate case. As I understand it now, there was none?

A. Not at all in the gross, no, sir.

Q. And whether that corresponds with the cost of the Northern Pacific or not, you don't know?

A. No, sir.

Q. Now, I notice here that in making this you have increased the amount under all the classes, except A, B and C, by about $95; that is, you have just about doubled it. On what theory

do you do that?

A. It was expected that the branch lines, under ordinary circumstances, would not have as expensive a class of station buildings and fixtures; that is, they might not be so large, and I took an arbitrary to decide that and assume that the main line would be about twice as much as the branch lines, but wherever we found a branch line with stations of the same character as the main line, we immediately noted that and put it into that class. The cost per mile of railroad is independent of whether it is on a main or a branch line.

Q. Then as I understand you, much of the main track may be of a low cost of construction so it would come under these early tables A, B, C, and the branch lines, a number of them, might be of a heavy or costly construction, and come under these higher classifications of cost?

A. Yes, sir, that is right. There are 125 miles of track from Missoula to Wallace, and there is not a single cheap-cost mile on the whole 125 miles; not one.

Q. And that is a branch line?

A. That is quoted as a branch line.

Q. And is that one on which there is a tunnel?

A. Yes, it has a tunnel and it crosses a range of mountains. Besides that, it not only has big tunnels, but it has very expensive, high bridges, made of timber in most cases. The 125 miles from Missoula to Wallace has not a single cheap-cost mile upon it.

Q. But as to the cost of the tunnels on the line?

A. Well, a single-track tunnel is worth in the neighborhood of $900,000 per mile, where it is lined with masonry.

Q. And there is such a tunnel on that line?

A. Well, it is not as long as that.

Q. But that would be at the same rate?

A. Yes.

Recess until 2 p. m.

AFTERNOON SESSION.

Q. You have shown me one of your note-books which you used on making your inspection, covering what is known as a branch line from Missoula to DeSmet?

A. DeSmet to Wallace.

Q. Known as a branch line, and from this it appears that that branch line, a very large part of it, is classed as EF, and DE and G, FG, IJ, GH, K and J.

A. Some L's.

Q. Yes, and some L's I believe.

A. Yes, sir.

Q. So there is a case in which your notes show that branch line is of as high a class of track as shown in this list of tables, Ex. 24?

A. You don't mean high class, a high cost.

Q. I should have said high cost instead of high class.

A. Yes, sir.

Q. You said, as I remember, that it also happened, in many places on main lines, they were low cost, and you instanced the Red River valley.

A. Yes, sr.

Q. Have you your notes on that?

A. Yes, sir.

Q. Let us see whether your notes verify your statement on that.

A. There is Fargo to Mandan (producing note-book).

Q. That is Fargo to Mandan, in North Dakota. That is main tracks, is it?

A. Yes, sir.

Q. That runs M and N and DE and E?

A. DE would represent about $18,000 a mile; E represents $20,000 a mile; D represents $16,000 a mile.

Q. You would call D and E low cost, then, I suppose?

A. For main track, yes, sir.

Q. Referring now to Ex. 24, under the head "Shop, roundhouses and turn-tables, $23 per mile," is that the figure as it was made up in the list of tables, before you made your inspection or afterwards?

A. After.

Q. You changed that, did you, after you made your inspection?

A. Yes, sir.

Q. What was it before you made your inspection?

A. I don't remember.

Q. Was it more or less?

A. I am quite sure it was more.

Q. Tell us how you arrived at the original figure which you inserted in making up that table and how you arrived at this figure of "23" in the table as made up after your inspection and why you made the change.

A. I made an estimation that there would be, at small points (division points) a turn-table or Y, a small engine-house, a few things of that kind, and prorated it on that basis.

Q. That is, at regular intervals, approximately?

A. No, at junction points, where they were likely to need such facilities.

Q. And you, in your own mind, assumed that they would require about a certain capacity and quality and that the price would be about so much?

A. Yes, sir.

Q. You made up your table originally upon that basis?

A. Yes, sir.

Q. I suppose you got the rate per mile by dividing that total by the total number of miles of main line?

A. Yes, sir.

Q. And after you made your examination you changed that figure. Now, what was the basis or reason for the change?

A. Back in the Spokane rate case, Mr. Darling's office fur-

nished me with a statement of all shops, round-houses and turn-tables, giving the size and character. I estimated the value myself. That entered as a total in the estimate in the Spokane rate case. When we worked up all these large terminals, including some of the smaller ones, we deducted the amount of shops, round-houses and turn-tables and appurtenances from that total that I made, and made this new prorate per mile.

Q. This prorate per mile of $23 here, then, is the difference between the total which you got by assuming that there would be round-houses and turn-tables and shops at junction points and of such a character as you supposed they would be, and deducting from that the amount of construction of that character included in the terminals, and then dividing that difference by the lineal miles of road?

A. No, sir, that is not it.

Q. That is the way I understood you.

A. No, it doesn't agree with my previous statement. Shall I re-state it?

Q. If you will.

A. The Northern Pacific Company gave me a statement of its shops, round-houses and turn-tables, without regard to whether they were large or small, or where they were located, but it gave me the dimensions and the character of the material they were made of.

Q. Was that before or after you made your inspection?

A. That was in the Spokane rate case. I then took unit values per square foot of surface for those various kinds of buildings, and the total of that estimate was $3,972,125. After I had made this trip on the Northern Pacific railroad, we calculated, from the notes that we took, and the station plats that were furnished us, the value of the shops, round-houses and turn-tables on those 51 stations.

Mr. HOW: Shown separately in Complainant's Ex. 25?

WITNESS: Yes, sir. That total was deducted from the $3,972,125. That then represented the small frame engine-houses at junction points, the small turn-tables, or the turn-tables, rather, and that, divided by the total mileage, 5,785 miles, gave the rate per mile in that statement, Ex. 24.

Q. I understood you, in your first statement with reference to this matter, to say that in Ex. 24, as it was before you made your inspection, you had another figure than $23; in column "A," for instance, as the cost or value of shops, round-houses and turn-tables per mile of main line. That you got that other figure which you then had in it by assuming that there were buildings of that character at the different junctions and points on the road where it would be appropriate to have them, and, assuming that they were of certain values, taking the total of those assumed values for those assumed plants, and dividing it by the miles of line. Am I right in that?

A. So far, yes, sir.

Q. Now, that gave you the total amount on which you arrived at the rate per mile you included in that schedule before you made your corrections?

A. Yes, sir.

Q. Now, since you made your examination, you have put another rate per mile in there for buildings of that character and you have arrived at that rate per mile by taking first the sum of $3,972,125, deducting from that the value which you found upon your inspection should go to certain terminals, and dividing that difference by the miles of line, which gave you $23 per mile?

A. That is right.

Q. Now the question I ask is this: Was that total upon which you made your first figure per mile which you included in this Ex. 24, before you made your inspection, $3,972,125, or some other sum?

A. It was some other small amount and a different, a small

amount, per mile of road.

Q. A different and smaller amount than this?

A. No, a larger amount than that shown, but not materially larger, and I had that in mind in checking all these big stations.

Q. I want to get at whether you made the same distribution or apportionment, in the first instance, upon the same total, including the terminals.

A. No, sir.

Q. Or upon a different total.

A. A different total.

Q. Greater or smaller total?

A. That assumption was on a larger basis, a larger rate per mile than $23.

Q. Then it might be a larger one or might not. Can you tell us what that figure was?

A. I can't tell what it was, but I know it was some larger.

Q. You don't know what the total was?

A. I do not. I had the gross total for all.

Q. Now, this figure, then, of $3,972,125, total upon which you finally made your distribution, was the figure used in the Spokane rate case, was it not?

A. Yes, sir.

Q. Then, as a matter of fact, in this table as finally constructed, this figure of $23 has no relation whatever to your assumption as to number or character or value of plants?

A. Yes, it has.

Q. I mean your assumption which you had in mind or upon which you made originally your Ex. 24.

A. No, sir.

Q. Then all you have done in this case, so far as Ex. 24 as it now stands is concerned, to get at this rate per mile for shops, round-houses and turn-tables, has been to take the total which you had for such structures in the Spokane rate case,

deduct from it the amount which you have included elsewhere, and under that head, for terminals, and divide that difference by the miles of road?

A. That is right.

Q. I call your attention, on this Ex. 24, to the same item or class; under columns A, B and C, you have a rate of $23 per mile, whereas, under all the other columns, you have a rate of $205 per mile?

A. Yes.

Q. Why that difference?

A. On the less important lines they might have only a one-stall frame round-house, to illustrate; and a like turn-table. On the important lines where they used heavier power, and more of it, they would have more stalls in the round-house and heavier turn-tables.

Q. Yes, but you have already told us that, for instance, you might have a branch line under these higher-cost roads, you might have a main line under the cheaper-cost roads. Now, upon that basis, we would have only $23 per mile on the main road (cheap construction, for buildings of this character), and on a branch line of a heavier construction we would have $205?

A. Well, that is true, too. While it may be that a whole freight district is of a very light-grade construction, they would use very heavy power on that because they had the tonnage to move, and they would move it in single trains all they could, whereas on the branches in many cases, there isn't the business to warrant the use of bigger power; and the result of it is they use lighter engines, and the ratio is made arbitrarily between $23 and the larger sum, that is all.

Q. Then that ratio is purely arbitrary?

A. Entirely so, and the gross amount of all of those items would equal the difference between the total in the Spokane rate case and the cost of those buildings or terminals.

Q. That is, the gross of the road as you have classified it,

upon the basis of these figures, $23 and $205, would equal the gross for those figures in the Spokane rate case, less the value of terminals?

A. Yes, sir

Q. But still I haven't made clear to you, apparently, what is bothering my mind. I am not able to understand, in view of your testimony, how you can say that $205 is the proper amount, to include in your tables for any one of these classes, or how $23 is the proper amount, because you have already said that you might have a main-line that would come under class A, B or C, and a branch-line come under class K, L or M.

Mr. HOW: Now, has the witness testified that $205 is a proper amount?

The MASTER: Well, it appears from the exhibit that that is the amount he set it at.

Mr. DURMENT: He has put it in his exhibit and tables.

Mr. HOW: I hope the Master understands it better than the counsel does.

Mr. DURMENT: I certainly hope I understand it better than counsel to my right does.

The MASTER: Well, let the witness answer. If there is any explanation to be made, let it be made.

Mr. HOW: The witness has testified, a dozen times, that it is a purely arbitrary proportional division.

The MASTER: Let him testify, then.

WITNESS: Suppose I had taken all the main and branch lines and divided that amount by 5,785 and put it in this column at a rate per mile, whatever it would figure out; without regard to whether it was branch or main, light or heavy construction, it would have amounted to a certain sum in the aggregate. These divisions I have made when multiplied by the mileage on main lines in the aggregate amount, are identically the same.

Q. And that method would have been just as fair for each

one of these classes as you have them here as making them $23 for A, B and C, and $205 for the rest, wouldn't it?

A. Not quite.

Q. Why?

A. I will tell you why. If you were to ride over a piece of prairie line and that argument which you submit was put in there, it would increase the cost per mile, and you would say, "Now there is not any merit in that at all; it isn't worth that per mile." And I would grant you that at once, and so, simply (arbitrarily, too), we put these rates lower, for that reason and that reason only; so that, in the aggregate, it makes no difference at all in the cost of the Northern Pacific railroad whether that was a prorate uniform for all those classes or whether it was divided as I have done it.

Q. Well, that may be.

A. Then another thing. We had another check I want to tell you about, and that was we had a class of buildings on a number of these light-grade branch lines which we estimated in a general way, and helped us out to the conclusion of $23 a mile, because the light construction of those first three classes —well, in two of the three—would be a very cheap-class railroad.

Q. But after all, then, the division is arbitrary?

A. Entirely so.

Q. You have said that it makes no difference, in the end, in valuing this road, whether you make an arbitrary assignment of the item "shops, round-houses and turn-tables" in your Ex. 24 of $23 per mile under classes A, B and C, and $205 under the other classes, or whether you should apportion it upon the basis of total mileage and make the same amount for each class; that in the end it will give you the same total. That is right, is it not?

A. Yes, sir.

Q. Now, I say that is true, I should think, assuming it to

be true that the 5,785 miles of main track is made up of the same number of miles of each class according to your Ex. 24 as you have shown it in your Ex. 25; that is, that, taking these $23 per mile on A, B and C, and $205 on the other classes, gives you the total which you started out with; but suppose, instead of the first two items "515 A" and "440 AB" they were "E," which would increase the number of "E" class by 955 miles, then if you applied these totals here in your tables, you would get away yonder in excess of the proper amount, wouldn't you?

A. No, sir; everything is reduced to 5,785 miles and never to exceed the amount shown in the totals for each of those items. They were checked over properly in the Spokane rate case.

Q. Well, let us make this clear. Just take a pad, we may want to use it a little. You have a table here, Ex. 24, in which you give the cost per mile of road of different classes. Now, we will assume that the defendant in this case wants to make a valuation on that road using your table to do it with, and that it sends its men over the line to see how many miles of class A, how many miles of class B, how many miles of class C there are, and it comes back and reports that it is all right as shown by Mr. Berry's Ex. 25 except the first two items, 515 miles classed as "A" and 440 as "AB," each of them ought to be classed as "E." That would strike out the 515, 440 A and B and would give us 1,427 miles of class "E," so we would then have a total of 5,785 miles with no "A" in it, no "AB" in it, but 1,427 miles of "E" instead of your amount. Now, if you applied $205 a mile for buildings there, we would go away beyond in excess of every amount of buildings in that exhibit?

A. Not at all. It would simply represent his opinion of the class of railroad in which his cost of building that road would be either less or more than mine, and nothing else in the wide world. I don't care how he classes it; I don't care what he puts into it, it simply represents his opinion, and is multi-

plied by the classes to represent an amount for the grading of this road, in his opinion, which would differ entirely from mine.

Q. Sure, and would be greater.

A. And would be greater—greater or less, as it might happen; and has nothing at all to do with that rate of $23 or $205 a mile, because he would put it in a class, in the higher priced railroad, and his totals would be more or less than shown on that sheet.

Q. That is just what I say,—that whether or not the total amount which you say was the value of all the buildings there, would be arrived at by using these figures you have given in your Ex. 24 here, depends, for the accuracy of its result, upon the number of miles of each class according to this table, doesn't it?

A. Why, of course.

Q. And if he should find a thousand miles of a higher class of road, take it all together, than you did on this line—

A. And replaces a thousand miles of a lower class than I have—

Q. No, he simply finds that what you have fixed as a low class he puts as a high class.

A. The same identical mile of railroad?

Q. Yes.

A. Yes.

Q. Using your figure here of $205 would give a total in excess of your tables?

A. Of the total at the bottom?

Q. Yes.

A. No, it wouldn't at all. It wouldn't have anything to do with that table. Suppose he disposes entirely of the AB's here and adds them together and throws them all into "E" class, it don't affect that table at all; he simply cares to get the total. It represents his opinion of the value of the railroad, and every engineer might make a different classification as he

went over the line.

Q. Certainly.

A. That is all there is to it.

Q. That is to say, then, that these figures here, to get the result which you claim is correct, depends upon the lines of road, the miles of line of road being classified as you have classified them in Ex. 25?

A. No, I don't classify them in Ex. 25 at all. I simply get a basis for a value there and I classify it, and here is the classification right in here, the number of miles of each class of road.

Mr. HOW: That is Ex. 25.

WITNESS: Oh, I beg your pardon, then; that is all right.

Examined by Mr. HOW.

Q. Mr. Berry, I do not understand that every one of the 515 miles in class "A" has $23 worth of shops, round-houses and turn-tables upon it; am I right in that?

A. Yes, sir.

Q. I do not understand that every one of the 472 miles in class "E" has $205 worth of shops, round-houses and turn-tables upon it; am I right about that?

A. Yes, sir.

Q. I understand that the $23 for class A, B and C, allowed for shops, round-houses and turn-tables, and $205 allowed for each other class under the same heading, is a purely arbitrary division?

A. That is all.

Q. And it is a merely ratable proportion that you assign to each mile in those classes, respectively?

A. That is all.

Q. Just to reach the aggregate which you determined ought to be reached?

A. That is right.

Q. So that if anybody else going over your work took these

515 miles out of class A and put them into class E and multiplied by the total at the bottom or the footing of the figures in class E, instead of by the total at the bottom of the figures in class A, he would necessarily get a higher figure?

A. Yes; which would not represent an increase, and ought not to.

Q. In the total value of shops, round-houses and turn-tables?

A. That is right.

Q. In that case you would have to alter your ratable proportion that you assigned to each mile?

A. That is true.

Q. Now, that is all there is to it. And then I understand, further, that your classes are formed entirely upon grading to start with; am I right about that?

A. Yes, sir.

Q. And that these other things, in the way of fencing, interlocking and signal apparatus, station buildings, fixtures, shops, water-stations, etc., are assigned to each mile upon a ratable proportion, and where you have made a difference you have made a difference simply based upon a general difference in the light of your experience between a light-constructed mile and a very heavy one?

A. That is right; and in all cases in the aggregate it represents the total.

Q. And in the aggregate it represents the total. And if the classes should be changed on account of a difference of opinion between you and some other engineer with regard to grading, you would simply change the ratable proportion assigned, leaving the total the same?

A. That is right.

By Mr. DURMENT:

Q. Then as I understand it now, this Ex. 24 as it is now made up, was arrived at in this way: You took the total for the cost of these various items; you then took the number of

miles of the different classes of road according to A, B, C, D, E, F and so on, and then you distributed those totals, and according to your judgment of what they ought to be per mile, to each of those classes, and in such a way that upon the mileage of each class as you found it it would equal the total?

A. That is right. I think I can help you a little on that.

Q. I would rather you wouldn't just now. The result of that is this: that so far as this table is concerned, then (Ex. 24), it would not be of use to anybody else as furnishing a guide or rule by which to estimate the value or cost per mile of road?

A. Well, he can make his own table, every engineer can do that.

Q. I know, but I mean so far as taking your table is concerned. For instance, if a man should undertake to estimate the value of this road and take your tables as given in Ex. 24, and should assume, for instance, going along the line and find main line of construction "A" and pay no attention to the buildings on it, that is, of class "A," and assume it was $23 per mile for buildings there, he might be away under what the buildings actually were, mightn't he?

A. Well, I don't know.

Q. In a stretch of ten miles he might be?

A. Well, I would rather not answer any such suppositious case as that. I don't know just what he would do. I will say this—

Q. No, I want an answer to my question or nothing.

A. Well, I don't know.

Q. You don't know?

A. No.

Q. If he should go along and take one of these higher classed branch lines, say the line between Missoula and that line you spoke of this morning (I have forgotten it), and pay no attention to the buildings, so far as that is concerned, but should examine the construction other than the buildings, the

grading (just as you classified the road, you say), and conclude that according to the grading on that it would come under class L, and then should include $205 a mile for buildings, he might be right or he might be wrong, might he not?

A. Why, no, you are mixing two different conditions up. In the first place, if he would make his own classification there of the grading, that ends that part of it. Then let him make his own table as he wants to for buildings and everything else.

Q. Yes, that is just the point.

A. But in no case, in the aggregate of any one of these items, shall he exceed the total of this; I don't care how he divides it, in the end he will get the same estimate I do, provided he classifies the miles.

Q. Then you didn't make this table for the purpose of getting the aggregate values; you got your aggregate values and made your table to fit your aggregates?

A. I didn't do any such thing.

Q. Didn't you?

A. No, sir. I made the upper part of that, as I have said two or three times before, as a guide to classify the grading, and I didn't use the lower half of that table at all on the trip.

Q. But when you came to make your classification afterwards on these gradings here, you have made your assignments here of the cost of these various materials by distributing or apportioning the total over the entire line; that is, the totals over the entire line according to your ideas of what would be fair and not overrun the aggregate?

A. That is right.

Q. You didn't first figure out your amounts per mile by an examination of the buildings and then get your totals by multiplying your miles with them, did you?

A. No; and I will say more still to you, and taking your own illustration, that if every one of those items in the lower half of that sheet was prorated on a straight mile basis, and

your engineer agreed in the classification, I wouldn't care what class you put them in.

Q. Sure, sure.

A. So that, in the aggregate, there isn't a particle of difference.

Q. If you agreed on the classification.

A. We absolutely can prorate the aggregate at a rate per mile all of the same kind, and the depots and number of miles of classification, I don't care what he uses, there wouldn't be any difference.

Q. True, but suppose he doesn't adopt the classification?

A. That is a question for every engineer to judge for himself. That has nothing to do with my testimony.

Q. Then if he doesn't adopt the number of miles of classification you have here, your tables as to values will not be worth anything?

A. Not at all.

Q. Not reliable?

A. They are absolutely reliable.

Q. Not as to him, not as to his judgment?

Mr. HOW: Not unless he knows how the tables are made. Those figures, he has testified so many times, were not put down there to signify the value of any particular mile with regard to shops and round-houses. If he don't know how the table was made, it wouldn't be of any value.

Q. Then the proposition is this: That if he takes your classification on the upper sheet here, before you reach any of the values, he can use your values for these particular items given in that classification in the lower sheet and not exceed the total?

A. Transpose them in any way that he chooses, that in no one item does he exceed the value of those, and I don't care what rate per mile he puts in.

Q. But you say you made your first table and your inspec-

tion without reference to the values given in the lower half of it.

A. Yes, sir.

Q. In other words, you classed your road according to grading. You said to Mr. How—

A. Certainly.

Q. —that the grading was what fixed the classification A, B, C and D in your mind.

A. That is right.

Q. And in doing that you paid no attention whatever to values for those particular items in dollars and cents in the classes A, B, C and D as it now appears?

A. Yes, sir.

Q. If another man should pursue the same course as to investigating or inspecting the road, taking the upper part of the table and disregarding the lower part, and found that he disagreed with you as to the classifications of the line, and that instead of 472 miles class "E" you had no "A" and no "AB," but had 1,400 and some odd miles of class "E," then he could not rely upon the figures in the lower half of your table for the values of the buildings?

A. No.

Q. On that line, could he?

A. No.

Q. And if he did, and included buildings at that figure on his entire table he would overrun away yonder your figures?

A. He might, yes; but I can't conceive of any man, when he adopts a different classification, that he don't prorate those items down below, so that in the aggregate he doesn't exceed the estimated cost.

Q. Well.

A. If you start with a certain premise you follow it to a conclusion, and if you change your premise you must change your conclusion.

Q. Now, that applies to every item on the lower half of this sheet, doesn't it, what you said now?

A. No.

Q. Well, now, what ones is it that it doesn't apply to?

A. I think that the ties remain a constant figure, depending upon the practice; the price per tie is the same whether used in the main or branch line, and it is only affected by the number used. The rail would make no difference, because it is specified, the weight of rail determines that. The unit of price per ton was just the same. And track fastenings are the same way, because there are less of them, and there are not so many of them in the lighter as in the heavier. He might want to use a different valuation in frogs and switches. His tracklaying and surfacing, he might change; his fencing of right-of-way wouldn't be changed at all; it would cost just as much one place as another. The road-crossing signs and cattle-guards under the same conditions would not be changed. The interlocking and signal apparatus would not be changed at all without reference to its class. The station buildings and fixtures, the shops and round-houses and water-stations, the grain elevators and warehouse and miscellaneous structures would be.

Mr. HOW: Those might all be put on to one mile, so far as the result is concerned?

WITNESS: If it was all put on one mile the cost would be represented by the total of that class of work.

Q. Now, you are not able to say, are you, that any single mile of road on the line of the Northern Pacific corresponds to any total value given for a mile of road under any class on Ex. 24 from "A" to "T"?

A. Why, I have made my estimate based upon my opinion that all of them are right.

Q. Under your Ex. 24, as made up for class "A," you have here as the cost of a mile of road in that class, plus the proportional length of siding, $11,696; can you say whether there

is a single mile of road in the Northern Pacific System the value of which corresponds to that figure, $11,696, just considering the—

A. Just in one mile?

Q. Any mile.

A. No, sir. I will add more to that; you haven't got an engineer in the state employ that can take any mile of railroad that he has estimated and say that his quantities are absolutely true and accurate and according to the actual cost of that mile of road.

Q. This hasn't anything to say to the quantity, this is a question of value.

A. I mean the actual cost of a mile of road, no matter how much care he devotes to it.

Q. Assuming your estimate as to quantities put in these classifications to be correct, can you say that there is a single mile of track on the N. P. System which is of the value of $11,696?

A. Just that exact amount?

Q. Yes.

A. No.

Q. Can you say that, assuming your dimensions, your estimates here, as to the amounts in the upper half of your table to be correct, that there is a single mile of road on the N. P. System anywhere, of the value of any total under the columns B, C, D down to T?

A. No; I will tell you why not. It was not intended they should be. The tunnels are shown as a separate item, and they occur on a certain mile of railroad and it is not included in that class. The total cost per mile shown on the bottom of that represents the average cost per mile for the items shown only, that is all. There are more miles of road that have tunnels on them that are represented in these classes, which, if the tunnels were included in it (tunnel or tunnels) it would

increase that cost very much indeed. It has got miles and miles of ballast on those classes shown, and amounting to 2,756 miles of main line, 1,782 miles of branches and 1,292 miles of sidings, that should be added to that, wherever it is—a very large item. It has got, on miles and miles of the road over 6,350 bridges we have given you the detail of, should be included in the cost of the rate per mile of that road, wherever it happens to be. It has got over nine million dollars—well, it has got over eleven million dollars in the bridges that would be divided in the cost per mile of this road. It has got over twenty-two million dollars of terminal work that would be included if you could make it exact. It has got 107 million dollars' worth of land that you could locate on some one of the miles mentioned in that report. The same thing would hold good with all the items that are shown, as Kalama ferry, and Shop Machinery and Tools—I venture to say that I could put those shops and tools, of a million and one hundred thousand dollars in not to exceed twenty miles devoted to that; that would add whatever that prorate might be. I could put the General Office Buildings on two miles, one at one place and one at another. The Miscellaneous Buildings would be the same way. It don't include the Additional Freight at Tariff Rates on Foreign Lines. And I could locate a mile at any of the Ownership in Following Property heading that would be added to those, so that the items in the bottom of that do not in many cases represent the total cost of the miles of railroad, and it never was intended to.

Q. Now, we will get back to the question again. Taking your Ex. 24, in which you have classified these roads and in which you have given the cost of construction on the different classes, and leaving out those portions where there are tunnels, leaving out the question of ballast, leaving out the question of bridges, which you have put in in a lump sum, leaving out the terminals, leaving out the land values, which you don't

include in here at all, leaving out the office buildings and the freight tariff, is there a single mile of road on the Northern Pacific System the value of which, exclusive of those things, corresponds to the total cost per mile you have given for any class in this Ex. 24?

A. Suppose you put those items inclusive. I don't know.

Q. Well, I will put the question to suit myself.

A. I know, but you may have neglected, in your memory, to include all those items that I called off for you.

The MASTER: You better answer it as he puts it, if you can.

WITNESS: Well, I don't know. It is leaving out the detailed sum for bridges.

Q. I will change that question in this way: Leaving out all those things which you have mentioned as not being included or shown in this Ex. 24, is there a single mile of line upon the Northern Pacific Railway that you know of, the value of which, or the cost of which, corresponds with the total amount, in dollars and cents, you have given in this Ex. 24, for any class?

A. I don't know. If you look under the class "I," where the Cascade tunnel is on two miles, it is 9,833 feet long. The value of a mile of "I" is $51,919. The mile that that tunnel is on is worth approximately $900,000 more than "I."

Q. And so far as your table is concerned, in fixing the value of that mile of road, it is not worth the paper it is written on, is it?

A. Of course it is.

Q. In what way?

A. Because I figure the other items, aside from the tunnel itself, alone.

Q. Well, do you know that of that $900,000 per mile, $51,919 was the cost of the road outside of the cost of the tunnel?

A. Whatever class it happens to be, I only illustrated that class.

Q. Do you know?

A. Yes, I do.

Q. Was that the cost?

A. Yes, sir, whatever the tunnel is, less that $51,000.

Q. How did you find out that that mile cost exactly $51,919 outside of the tunnel?

A. Simply we took the mile as a straight mile and then the tunnel beside, and whatever the sum of the two is, together, would represent the cost. What I am getting at is this, that there are miles of road that are classed there that do not represent all the items that are in the construction of that particular mile. If a portion of that tunnel is on a certain mile and a part upon work, we would class that portion outside of the tunnel, whatever it might be, as I, J, K, and the distance outside of the tunnel, if it was a half a mile, would be a half of I, J and K and the tunnel portion added to it; in other words, all outside of the tunnel is classed and put down in a book as of a certain class of railroad, and the portion outside of the tunnel in that mile is taken of that class of its prorate and the portion of the tunnel on the mile would be added to it to get it; and you would also add ballast. Now, I want to illustrate that again by another statement if you will permit me. Our note here is that the Columbia river bridge near Pasco is on mile 231. We class that mile, outside of the bridge, as EF. The bridge itself cost $667,289.

Q. And that is not included in your class E or F?

A. No, sir.

Q. That cost of the bridge?

A. No, sir.

Q. Well, I will come back to my old question, which you have not yet answered: Is there a single mile of road on the Northern Pacific System, excluding these items you have mentioned of tunnels, ballast, bridges and so on, which you have not carried into your classification here, which cost the total cost of that class per mile as given in your Ex. 24?

A. There may be a lot of them that I can't tell you positively about.

Q. Yes, and there may not be one?

A. There may not be one.

Q. Then your values and tables here, your estimates, are approximations and are not intended to be accurate, or of any particular value, except as to your total value of the road?

A. Why, they are more than that, they are very close figures on the value.

Q. That is, the aggregate values?

A. Yes; not specific miles, no. I will go still farther and tell you that the quantities are not specific, either. Some one else might estimate them entirely different, give an entirely different classification, which would change the quantities on any mile of the road.

Q. Then if anybody would have time enough to go over any particular portion of the line and make a careful and accurate examination of it, your results might be entirely different from those given in these classifications in Ex. 24, might they not?

A. Yes, sir.

Q. And your total value of the road might be entirely different?

A. Yes, sir, and I believe increased, too.

Q. I suppose there is no chance that they would be decreased?

A. No. I will tell you why, too, because on a close examination of that kind and inquiry you would find a great many things that you could not get except by that inquiry, and very careful examination, which would increase the cost.

Q. Then you mean to say that, with a completed road in operation, if you go over it and examine it carefully, you can't tell what work there was done in it nor what the cost of it was?

A. In many instanes you can't tell at all.

Q. And yet you have allowed ten per cent in your estimates?

A. Yes, sir.

Q. —of what you have estimated the total cost, to cover just that thing?

A. That is it exactly.

Q. And if you went over it and made another and more accurate estimate and increased the cost of the road, you would still have your ten per cent for contingencies, wouldn't you?

A. I would.

Q. If, at the end of another year, you took more time and made a still more accurate one and discovered you had overlooked other things, the second time, which would increase the value, you would still put in a ten per cent of the entire thing for contingencies, wouldn't you?

A. If you would tell me how long you are going to carry your "endless chain" then I could tell you, but I am confining this to a year. If you take sufficient time, all the time you want, get at all the points you can, there is no need of your making another estimate of it, you have done with it.

Q. But you would still allow ten per cent for contingencies after that kind of an estimate?

A. I would, yes, sir.

The MASTER: The more careful the inspection the less you would add for contingencies?

WITNESS: Why, I don't know that that is so. You might pick out four years or five years in which to build the Milwaukee & St. Paul Railroad, and you would never have that flood which the people in Montana tell me was never equaled in the history of anybody that cost some $700,000. Now, that might be done. I venture to say that in the foundations of every important bridge—the weather conditions might affect it, so that at certain times it would cost a great deal more money than others. Take the Bismarck bridge, everybody knows the

history of that, there were hundreds of thousands of dollars sunk in that stream that nobody could ever find in any river protection. The estimated value of that bridge, as nearly as we could get at it, is considerably over a million dollars. It is not in sight, it is buried in the stream. I had charge of the Blair bridge, on the Northwestern railroad, and we rip-rapped both sides of the stream, we spent $150,000 to $200,000 every year, and it all went into the current.

Q. Then the conclusion still is, I believe, that whether you make an accurate estimate or a hurried estimate, you would include ten per cent for contingencies?

A. With that word "accurate" I won't answer the question.

Q. You can't answer that question?

A. No, I don't answer it. My answer will be that I do not answer as to the word "accurate."

Q. I will ask you whether you can answer the question or not.

A. I can't answer it.

Q. You can't answer it?

A. No, because the word accurate is not a proper word in connection with it.

The MASTER: Supposing it was accurate, would you need anything for contingencies?

Mr. HOW: Can you make an accurate estimate?

WITNESS: We can't make an accurate estimate. I could without assuming that it was accurate.

Q. If it was big enough and accurate you could?

A. Yes, sir.

(Laughter by the State's Attorneys.)

Q. How could you tell whether it was big or not?

A. Well, I got stuck once last year; I thought I had an estimate "oceans big," but when we get twelve inches of rain in twenty-four hours and it wipes you off the face of the earth you will appreciate what "contingencies" means, and what

"accurate estimate" means, too.

Q. Then the theory is that whatever sort of an estimate you make, you would put in ten per cent for contingencies?

A. I would; and I would be inclined to make it more than ten rather than less.

Mr. HOW: Do engineers generally do that?

WITNESS: I know of no exceptions to the rule.

Q. Now, let us get to Water Stations. Tell us just how you arrived at your figure for water stations on your various classes here.

A. The preliminary work assumed a water station at every sixteen miles on a main line and every twenty miles on a branch line, at about $5,000 per water station; that is, to make up the preliminary estimate of Ex. 24.

Q. And that gave you how much in your Ex. 24, as it was before you made your inspection?

A. Very largely in excess of what this shows.

Q. You don't know how much?

A. No. Then I went back to the Spokane rate case estimate for water stations and checked it up with the Northern Pacific cost, so far as we could, and, after getting what water stations there were on the Northern Pacific railroad, we deducted that from this gross amount and prorated the balance per mile of road, as shown in that statement Ex. 24.

Q. What gross amount do you mean?

A. The Spokane rate case estimate of $1,966,900 plus two special items.

Q. What were they?

A. The water station at Glendive and the water station at Mandan, both of which were large and expensive.

Q. And were not in existence at the time the Spokane rate case estimate was prepared?

A. I can't tell you that.

Q. You can't tell that?

A. No.

Q. And you don't know whether anything was included in the $1,966,900 for those two or not?

A. I don't think there was, because my pencil notes don't show that it was included and I don't think I was advised of those big water stations until I got ready to make this trip.

Q. But you don't know, accurately and definitely, whether that $1,966,900 did not include something for those two water stations?

A. Yes, I can answer you; it did not.

Q. What were the sums of those two?

A. Well, approximately $100,000.

Q. Each, or for the two?

A. No, for the two.

Q. Then that would give you your total that you referred to upon which you made this figure which is in Ex. 24 as it now is—was $1,966,900, plus—

A. About that.

Q. —$100,000, which would be $2,066,900?

A. Approximately that.

Q. Now, what did you take from that before making your prorate?

A. I thought I did include those two stations separately, but I didn't. That is prorated on the basis all the way through the total cost; the water stations were prorated on a mile basis.

Q. And the total cost was what?

A. Well, approximately what you have got there, approximately $2,066,900.

Q. That is to say, you took the figures that you used in the Spokane rate case, added to them approximately $100,000 for the two water stations at Glendive and Mandan—

A. Yes, sir.

Q. —and then divided that by the entire 5,785 miles of road?

A. Yes. We made a little variation, you will notice, for single and double-track lines. That is right.

Q. Now, how do you account for $335 being the amount per mile for all classes on this Ex. 24 except A, B and C for water stations, and A, B and C, $168?

A. An arbitrary amount that I placed myself.

Q. And you fixed those amounts in such way that applying them to the numbers of miles of each class, as you have it on Ex. 25, the total would be this $2,066,900?

A. Approximately, yes, sir.

Q. Now, take the grain elevators and warehouses, how did you arrive at those items, $160 and $321?

A. The chief engineer of the Northern Pacific gave me a list of those in the Spokane rate case, and I used unit prices of my own, and it amounted to $2,886,016. Then in the case of the warehouses, we found a number of those on some of these large station grounds; wool warehouses, for instance, at Glendive and some other places, those were included in the cost of the terminals. The balance, such as wheat warehouses, that the railroad companies build and own in the Palouse river country and at other places, were included in the prorate per mile.

Q. Let us see if I have a correct understanding of this. You took $2,886,016, which was the total value for grain elevators and warehouses, as you figured it in the Spokane rate case, taking as correct the number and character of structures as reported to you by the Northern Pacific Road, but using your own units of value to arrive at that result, then when you made your inspection you found that certain of the warehouses, at least, were included in the terminals—

A. Were at the terminals.

Q. —were at the terminals, and included in your valuation of the terminals—

A. Yes, sir.

Q. —and you deducted from those $2,886,016 the values of such warehouses as were at the terminals, and, taking the result after that deduction, you prorated that by miles of line?

A. Yes, sir.

Q. And this division of $160 in classes A, B and C, and $321 in the other classes, is purely arbitrary?

A. Entirely so.

Q. And they are made in such way, or, the division in that way is made so that assuming that there are the same number of miles of each class as shown in your Ex. 25, the total would be this $2,886,016, less the price of the warehouses at terminals?

A. Yes, sir.

Q. Now, your Miscellaneous Structures, how do you arrive at that?

A. Miscellaneous structures, Mr. Durment,—excuse my laughing, it is hard to tell what a miscellaneous structure is. It is hard to make a statement and go along a railroad and say whether you would class it as a station building or a miscellaneous structure, it is hard to tell. Now, there are snow-fences, there are hundreds and hundreds of miles, and very expensive, on the Northern Pacific Railroad, that is a "miscellaneous" matter, we have no other place to put it in. We have in some places range stockyards, very large, costing a good deal of money and away from a station,—we have to class that as a miscellaneous structure. The Northern Pacific has built, for a good many of its employes, homes to live in; it is not a station building, we have had to include those in miscellaneous structures. I might go on and add a lot of matters of that sort, and, if you care to have me, I will look up my records of what we have put in Miscellaneous Structures.

Q. Well, I want to know in a general way.

A. In a general way I am trying to give you what a miscellaneous structure is. You might have a bridge-watchman's house at an isolated point, not at a station, we would stick

that into "Miscellaneous Structures." There may be grain warehouses away from a station ground, it might be a little sidetrack; you get a little stockyard at such places as that, it is at no station, you can put it down in the same way, and so *miscellaneous structures* are what I call a dumping ground for everything that you cannot put under some classified head.

Q. My question is, having explained that, how did you arrive at this figure or these figures which you have included under these various classes in Ex. 24 for that item?

A. In the Spokane rate case I included in Miscellaneous Structures the general office buildings, $756,600. In this estimate I took it out and made a special entry of it. The Miscellaneous Buildings was a statement that I got from the chief engineer of the Northern Pacific of everything that he could think of that his records showed. Then we took the stockyards, of which there were 3,412,000 square feet, and multiplied it by 4½ cents per square foot, amounting to $153,540; and we took the number of track-scales at $1,500 apiece, that made $2,599,668—and I kept to that because I couldn't tell where all that stuff was, even on this inspection; and outside of the stockyards and track-scales which I could locate at some of the big terminals, I bunched everything else except the general office buildings and track-scales under Miscellaneous Buildings and deducted that amount from $2,599,668 and prorated it arbitrarily, as is shown in the bottom of this sheet. I would like to have you bear in mind I didn't feel that it was necessary, after having gone through the Company's records in the Spokane rate case and dug this stuff all out and did it the best I could and made the prices on it, and as I was now making this estimate based on the condition that it was then in, for me to go to work and dig all that out again; and bear in mind that that is eighteen or twenty months ago and I am a little hazy about some recollections, but that is my remembrance of it.

Q. Then as I understand it, you took each total which you had figured in the Spokane rate case and deducted from it the $756,000?

A. That is right.

Q. Now, what was that total in the Spokane rate case? You didn't give me that.

A. For the whole thing, you mean, including that?

Q. Yes.

A. $2,599,668.

Q. Now, from that you deducted the $756,000?

A. $756,600.

Q. And then took the balance as the correct value of Miscellaneous Structures?

A. Not quite that. There is a little break in that. I found some of those big stockyards at some of those big terminals, and I tried to include those in it and deducted that from it, leaving that balance, to be divided as I have stated.

Q. I don't quite understand the process up to that point.

A. Well, to illustrate: $2,599,668 is the Spokane rate amount; deducting from that the general office buildings, $756,600, leaves a certain amount. Now, I was able to locate a few miscellaneous buildings, such as lunch-rooms, at the terminals, and a few stockyards, not amounting to a great deal, at these terminals, and I wanted to show everything that was on a terminal if I could give it a value; I deducted it from that last named amount, which gave me a sum that I prorated as shown here.

Q. I see.

A. If you will please bear in mind, Mr. Durment, that every thing that was on each one of these fifty-one terminals I tried to include in the terminal.

Q. Then you followed the same course as you did in these other matters, you took the values as you figured them for the Spokane rate case, deducted the office buildings, deducted such

of those miscellaneous structures as you included in your terminal values, and then divided the remainder by the number of miles of road?

A. That is right.

Q. And in doing that you made the division of 148 per mile for class A, B and C, and 296 for the other classes—an arbitrary division?

A. Yes, but if you will notice, that nearly all of those bear the relation of one-third and two-thirds.

Q. And as so divided, however, they will equal the total figure which you started with, assuming that the same number of miles of each class of road as you have shown in your Ex. 25?

A. Yes, sir.

Q. Turn to your Ex. 26. I notice in this Ex. 26—which I understand was a statement explanatory of Ex. 24 and showing how it was made up—

A. Explanatory of both Ex. 24 and Ex. 25.

Q. On page 5 you say that grain elevators are included in Miscellaneous Structures.

A. Well, that is true, and they are mixed. If it happened to be on a terminal, one of those fifty-one places, it was included in the buildings; if it were not, it is stuck in Miscellaneous Structures.

Q. What I am getting at is this: On Ex. 24 you have an item for grain elevators and warehouses and also one for Miscellaneous Structures.

A. Well, I do have for the smaller places. Let me see now. You said page 5, did you?

Q. Bottom of page 5, I think.

A. Included in Miscellaneous Structures, that is true, but we modified it when we came to work up the terminals after we came back here.

Q. Yes, but still it would seem, then, that that is a duplication?

A. No, not at all.

Q. In this table?

A. Not at all. Let me tell you how this was done. I outlined this letter when on the road, and I had intended to include grain elevators and miscellaneous structures, and when I came back, having found some of them on these big station grounds, I included them in the value of station grounds so as not to get mixed up in it.

Q. The big ones?

A. Yes, sir.

Q. And then you put down as to the number of the station grounds?

A. Yes, for those.

Q. In the terminals?

A. Yes.

Q. But here you have got, aside from that, grain elevators and warehouses over the entire line that you prorate.

A. It is true, I prorated that, as an arbitrary matter, over the whole line, without regard to where they were, but in the aggregate it equals the amount of the balance not accounted for.

Q. Of the grain elevators?

A. Yes, sir.

Q. But then you also in this letter say that you included your grain elevators and miscellaneous structures?

A. Well, I was explaining that to you, that I changed that afterwards so as to not include them in the Miscellaneous Structures except as—I didn't include all of them in the Miscellaneous Structures.

Q. But you included some?

A. Yes, that is the idea exactly.

The MASTER: Those that were at terminal station grounds you didn't include?

WITNESS: As I have stated, two or three times before, I

tried to make the terminals, or those fifty-one stations we went to work at, cover everything there was on it. I wanted to look in here so as not to mislead you, if you don't object, just a minute; I was wondering whether the amount that I gave you for miscellaneous structures, according to this Spokane rate matter, might not include what I also carried as Warehouses at that time, and I can't tell you that exactly. I might get a record from the chief engineer's office of the Northern Pacific "about so many warehouses," or "so many grain-houses," and a warehouse might be a grain house, or a grain-house might be a warehouse.

Q. That is just the thing I had in my mind.

A. I took the whole together in getting this up. For instance, I have got in the Spokane rate case $2,886,016 for warehouses alone. Now, some of those were those big grain-houses at the Tacoma wharf, and then I have got these miscellaneous structures that I have told you about, so I have separated so as to have only one item Miscellaneous Structures, and it may differ a little from the amount that I have given you.

Adjourned until the morning of Thursday, September 17.

FEDERAL BUILDING, St. Paul, Minn. Thursday, September 17, 1908.

The hearing was resumed at 10 o'clock a. m.

JOHN B. BERRY,

recalled for further cross-examination, testified:

By Mr. DURMENT:

Q. Are there railroads that are a cheaper class as to cost per mile, built, than the class A of your Exhibit 24?

A. There may be.

Q. I suppose that it is possible there may be some that cost

than that even on the Northern Pacific, some small
tches?

I think not, or we would have made a new class.

But you made this classification before you went over
road?

That is true.

And before you had seen it?

Yes, sir, but if we had found anything that would have
of a cheaper character we would have made a note of it
half A or three-quarters A.

And you don't appear to have made any such note as
A or three-quarters A?

Not one for a whole mile.

There would be some portions of less than a mile that
t be?

I had in mind only where there might be, we will il-
ate, a tunnel covering a portion of a mile, and then grad-
or the balance.

I thought you said yesterday that in cases of that sort,
unneling would be valued as such for the length of the
el and that the railroad for the remainder of the mile
h included the tunnel (that is, outside of the tunnel)
d be graded as a class that calls for $51,000 per mile.

. How: No, he didn't say anything of the kind.

Did that refer only to that one particular instance, or
that simply an illustration?

That was simply an illustration.

And the grading for the rest of the mile outside of the
el in which the tunnel is included might be any one of
classes?

That is right.

Now, how many miles of this entire 5,785 did you pass
and inspect?

About 3,396.

Q. The other 3,396 you didn't see?

A. There weren't that many.

Q. Well, the remainder over; it wouldn't be that many but the remainder of the 5,785, you didn't see at all in this inspection?

A. No, sir.

Q. And as I remember, you said you were twenty-two days in making that inspection including the terminals?

A. Yes, 22 days; three weeks and two days, but there were two days that I didn't go out.

Q. And as I remember it, you say you spent three days on the terminals alone; that is, you may have inspected other terminals as you went along, but, as I remember, you said you put in a day, I think, at Seattle?

A. Yes, sir.

Q. And a day at Duluth?

A. No, a day at Tacoma.

Q. A day at Tacoma?

A. Yes, and a day at Minneapolis and St. Paul, and half a day at Duluth.

Q. In making this inspection of the line did you and your assistant make it on the regular passenger trains, or did you have a special that carried you over?

A. Both.

Q. I suppose that with a special you could control the movements more readily and could make a more careful inspection than you could on the passenger, couldn't you?

A. It would have given us more time at points that we wanted to stop at, yes, sir.

Q. And you could regulate the speed to suit your convenience to a greater extent?

A. Yes, sir.

Q. How much of the inspection was made in specials in which you could regulate your own movements?

A. Do you want me to give it exactly?

Q. Oh, no, approximately.

A. Oh, I should say over one-half.

Q. And what was the character of the inspection made by you on the half where you traveled by the regular passenger train?

A. Examined every mile the same by the regular, as well as by the special, and taking notes at the stopping points at big terminals of what I could see for myself and what I asked the local officials about.

Q. I suppose that the inspection would be made by standing at the rear of the train and watching it as you passed by, or in what way?

A. It was in the rear of the train.

The MASTER: How is that?

WITNESS: It was on the rear of the train. The car that I had was on the rear of the train, and it had observation windows, and tables inside with this data spread out so that we could have plenty of room to check everything.

Q. That was this Ex. 24, as it then was?

A. Yes, that was the one, and the books that both of us kept.

Q. Your note-books in which you made your entries?

A. Yes, sir; we had maps prepared, also, of the various features of the line, that we constantly referred to.

Mr. HOW: You had your own business car, did you, Mr. Berry?

WITNESS: Yes, sir.

Mr. HOW: What is commonly called a private car?

WITNESS: Yes, sir.

Q. Of course you made no measurements of embankments or cuts or fills as you went by, simply looked at them and judged as to whether they fitted these classes or any of them?

A. That is right.

Q. And about how many miles a day would you cover in that way?

A. Well, approximately 250 miles; sometimes less and sometimes more.

Q. Although you had a private car, it was attached to a regular train, and ran on schedule time for at least half the distance, or about half the distance?

A. About that. I could give you the exact data if you want me to.

Q. Oh, it isn't of sufficient importance; I simply wanted to know approximately.

A. Wherever it was impossible to cover the trip by daylight, or wherever I wanted to make stops to look over the terminals I asked for special service.

Q. Now, is it not true, Mr. Berry, that there is much—that is, that there are many miles of road on the Northern Pacific that would not be covered, the entire mile, by any one or any two of your classes on Ex. 24?

A. Oh, I think not. We used our judgment and combined the classes or a single class that would fit the conditions as we saw them.

Q. I understand that, but it also appears that you never combined more than two classes on any one mile of line?

A. That is true.

Q. Now, the question is, is it not true that, while approximately in your opinion that may be a fair way, accurately speaking, there are many miles of lines there different portions of which would come under different classes and where the entire mile could not be brought within any one or any two of the classes?

A. We never found a case of that kind that we could not classify, in our own judgment.

Q. And be certain, or reasonably certain, that it came within the requirements of the two classes?

A. There is no certainty of accuracy; It was our judgment that it met the conditions of one or two of the classes.

Q. That it practically did so?

A. Oh, our judgment that that was right.

Q. Now, you say you kept notes. We have spoken of them not as field-notes, but notes of the various classifications of the mileage. Will you let us see your notes for the road in Minnesota that you examined?

A. Take one of these books.

Q. Well, suppose we take the one that goes from St. Paul to Staples to start with.

Mr. O'BRIEN: You will find that in book 4, page 29.

A. You want from St. Paul to Staples?

Q. Yes, I would like to look at it, please, if I may.

A. (Producing note-book). Pages 27 to 34. There are my own notes in addition, for two or three pages, from Staples to Minneapolis, just in a general way. (Referring to another note-book).

Q. In making your inspection of the line from St. Paul to Staples, that, as I understand it, would take you on the line through Little Falls, Minnesota?

A. Yes, sir.

Q. I would like to see your notes, also, of your inspection from Winnipeg Junction to Moorhead, on the main line, and from Winnipeg Junction up to Fertile; that is on the line that runs through to Winnipeg, I understand.

A. I didn't go over that line.

Q. That is, you didn't go over the line from Winnipeg Junction to Fertile; that, is, the one from Winnipeg?

A. No, sir. Where do you want it from?

Q. From Winnipeg Junction to Moorhead or Detroit, anywhere in there.

Mr. HOW: Fargo easterly in Minnesota.

A. There is a line of two days, Staples to Fargo, and Fargo

to Mandan, pages 22 to 26. (Handing note-book to Mr. Durment.)

Q. Now, let me have the other one, will you please?

Witness produces note-book.

Q. Mr. Berry, will you take your note-book in which you entered the classification of the various miles of railway which you inspected and open it to the page which shows the classifications made by you between Northtown Junction and Staples outside the yards? I mean the line outside the yard beginning at Northtown Junction and running to Staples and read for each mile the classification you gave it, so the Reporter may get it.

A. In the absence of any comment as I go along you may assume that it is ballasted.

Q. Well, now, if the witness please, we ask you to read your classifications as you have marked them by letters, according to your Ex. 24, we have asked for nothing else.

A. Mile 139, EF; mile 138, E; 137, D; 136, DE; 135, FG; 134, E; 133, FG; 132, EF; 131, F; 130, F; 129, EF; 128, F; 127, F; 126, FG; 125, F; 124, F; 123, FG; 122, G; 121, FG; 120, EF; 119, DE; 118, E; 117, FG; 116, E; 115, EF; 114, EF; 113, E; 112, EF; 111, DE; 110, EF; 109, DE; 108, D; 107, F; 106, E; 105, DE; 104, D; 103, DE; 102, DE; 102, D; 101, D; 100, D; 99, D; 98, D; 97, D; 96, D; 95, FG; 94, D; 93, D; 92 D; 91, DE; 90, DE; 89, DE; 88, E; 87, DE; 86, EF; 85, DE; 84, E; 83, E; 82, D; 81, D; 80, DE; 79, D; 78, D; 77, D; 76, D; 75, DE; 74, D; 73, D; 72, D; 71, D; 70, D; 69, DE; 68, D; 67, E; 66, E; 65, E; 64, D; 63, E; 62, D; 61, E; 60, D.

Mr. How: Way down to 52 it is all the way "D."

WITNESS: 59, 58, 57, 56, 55, 54, 53 and 52 "D"; 51, E; 50, 49, 48, 47, D; 46, 45, DE; 44, E; 43, F; 42, DE; 41, F; 40, DE; 39, E; 38, EF; 37, E; 36, F; 35, E; 34, EF; 33, 32, 31, 30, 29 and 28, DE; 27, EF; 26 and 25, DE; 24, D; 23, DE; 22, GH; 21, DE; 20, DE; 19, E; 18, D; 17, EF; 16 and 15, DE; 14 EF;

13, D—Northtown Junction.

Q. That is to the edge of the Northtown Junction yards?

A. Yes, it is that mile-post just north of the crossing; it is equivalent to Northern Pacific mile-post on the other way of 12.1.

Q. My recollection is that you made some estimates or valuations of important station buildings and the like, you said, which you didn't apportion in this Ex. 24, but put into your total value of the road in a lump sum. Is that right?

A. That is right.

Q. Now, what of that class, if any, were found on this line which you have just read your classification of?

A. Sauk Rapids, Little Falls; that is all.

Q. Have you listed in your notes, made as you made this inspection the other station buildings and fixtures which were on this line at the points where you have given the classification and which you valued and the values given by you to them, if any?

A. No, sir.

Q. What?

A. No, sir. I have got a description of the character of the structures, but not at any particular station.

Q. Oh. Have you the number of the structures?

A. No, sir.

Q. What is the description you have of the character of the station buildings?

Mr. How: Read your notes as far as they go.

A. August 29th,—Just as to buildings?

Q. Yes, just as to the station buildings and fixtures.

A. "There were two-story section houses, two houses; water-tanks are wood with concrete piers; fair depots, except as noted hereafter are below the average." Under the head of Little Falls it reads: "Frame freight house, brick passenger depot. Get separate estimate and show in summary."

Q. That was not apportioned in this table, then, the Little Falls freight house and brick depot?

A. No, sir.

Q. Do you know how many you found below the average?

A. No, sir.

Q. And you don't know how many there were in the total, your notes don't show that?

A. No, sir.

Q. Now, as to water stations, do your notes show how many water stations you found on this line in Minnesota which you have given your classification of?

A. No, sir.

Q. And you don't know how many there were?

A. No, sir.

Q. Do your notes show how many grain elevators or warehouses there were, or the character of them on that line you have just read your classification of in Minnesota?

A. Outside of Little Falls?

Q. Well, I mean outside of those which were not distributed.

A. No, sir; my notes do not show.

Q. Don't know whether there were any or not?

A. Well, I know in a general way that there were; that is I know that there were section houses, depots, freight houses and tool houses.

Q. Yes, but my last question was confined to grain elevators and warehouses.

A. No, sir.

Q. You don't know how many there were nor whether there were any?

A. No, sir.

Q. And if there were any at Little Falls they were not prorated in this table or in your valuations but were segregated and included in the aggregate?

A. Yes, sir.

Q. Now, then, as to miscellaneous structures, do your notes show what miscellaneous structures there were on that line?

A. No, sir.

Q. Do you know?

A. No.

Q. Will you give us the values which you gave or estimated for the depots and buildings in Sauk Rapids, and also in Little Falls?

A. That was worked up in separate form, each terminal by itself, and I can't give you the details of every building on each of those terminals here.

Q. Well, I ask only for the values at this time.

A. I can't give you the values, even, in this book.

Q. Well, can you give us the total values for Sauk Rapids?

A. Yes, sir.

Q. Now, by total values for Sauk Rapids, if you can give it, I would like your values of those things which are not included in your Ex. 24 under the price per mile of construction, as a class.

A. The amount shown in the statement for Sauk Rapids and Little Falls is made up this way. That the miles that those two stations are on are classified according to these notes. At that time we did not know, and didn't want to know, what the limits of the station grounds were; so that, in the classification of that mile, where these stations were, it included its prorate of all the items in the bottom half of statement Ex. 24, grain warehouses, ties, rail, interlocking, miscellaneous structures—everything. We took Little Falls with the notes we had and the station plat, and we calculated the value of everything on those station grounds, deducted the prorate per mile that that was on from the total, and the balance gave us this value here. So that at both Little Falls and Sauk Rapids it does include a small amount, in accord-

ance with the prorate on Ex. 24.

Q. Then I can get at what you have that now, if you will give me your classification for the miles of line in the yards at Staples and the miles of yard of Sauk Rapids—No, we have got that already, haven't we?

A. Little Falls is on mile 108; Sauk Rapids is on mile 76.

Q. I don't remember whether you stated what of the lines in Minnesota you inspected. Do you remember? Did you?

A. In the beginning I stated just what I went over, but I can re-state it.

Q. Well, if it is in the record I don't care for it. Can you tell us approximately, or do you know, how much of the mileage in Minnesota you did not inspect?

A. No, sir.

Q. Turning to your Ex. 25, I notice that, instead of distributing the cost of the tunneling or the miles of road which run through tunnels, you have aggregated the cost of tunnels and shown them there under that head?

A. Yes, sir.

Q. As I understand it, the figures you have given there for the aggregate of tunnels is the total of the entire construction of the road, through the tunnel as well as the tunnel itself?

A. Yes, sir.

Q. So that while it is not a great deal, yet there are some five miles of it, I think. That five-miles tunnel is a part of the 5,785 miles total, isn't it?

A. Yes, sir.

Q. And this value here which you have given for the 5,785 miles includes a part of these figures which you have given under the head of Tunnels, does it not?

A. Yes, sir, the estimate of the 5,785 miles of the whole line includes all of the tunnels.

Q. So that there is a duplication to that extent?

A. No; wherever we had a tunnel, as explained before,

where it is about 9,800 feet through the Cascade range, there was no value given in that prorate mile, but the total value. If there was nothing but the tunnel on that mile there was no value given in the classification.

Q. Yes, that is it, but when you came to classify your road, you did classify the whole 5,785 and included a value for it in the first part of Ex. 25, which makes a total of 140 millions and over?

A. Yes, but it don't include the value of the terminals on that mile.

Mr. HOW: Nor of the tunnels?

WITNESS: No sir, nor of the tunnels on that mile. For instance, the longest tunnel they have is the one through the Cascade range, about 9,800 feet long; it isn't quite two miles, but the tunnel was on the two miles, and there was a little grading at each end. You see it is nearly 900 feet short of two miles so that there was a little of the approach cut at each end.

Q. What, if anything, did you include for that two miles in this first part of your schedule here, construction of the road, which aggregates 140 millions and over?

A. Just the amount that was outside the tunnel only.

Q. Just the amount that was outside?

A. That is all. The tunnel does not include rail, ties, tie-plates, ballast, or anything of that kind. The tunnel-cost includes simply the excavation for the tunnel and the lining of it.

Q. Well, that is what I wanted to get at and make clear, if I had the wrong idea: that in this figure here of tunneling you treat that as separate and distinct from the railroad, and in valuing your line, in the first part here, or classifying it and valuing it, to make your 140 millions and over, you treat it as 5,785 miles long?

A. Yes, sir.

Mr. How: Well, now—

Q. That is, you separate—

Mr. How: I will tell you how.

Mr. DURMENT: Now, then, you keep still, will you?

Mr. How: I will tell you how you can tell, if you will permit me to interpose.

Mr. DURMENT: I won't at this time.

Mr. How: You can add up this first column and find out whether it aggregates 5,785 miles.

Mr. DURMENT: I am taking the schedule as the witness gives it.

Q. You treat the tunnels, then, as so much extra and not a part of the road construction?

A. That is right.

Mr. How: It is objected to as having been testified to six times.

The MASTER: Well, let him testify to it again, the quickest way, in this connection.

Q. And you make up your value of the road clear through, including the tunnel, upon the basis of your table?

A. Yes, sir.

Q. And then you add to it the cost of making the tunnel?

A. Yes, sir.

Q. Now, as to your bridges, I see there are some 122 bridges given here which are not prorated.

A. Are you right about that?

Q. Well, I take it that that is what that aggregate means, that that is the number of the bridges.

A. No, it means that there are 122 in that list that are fully detailed.

Q. Yes, that is what I mean.

A. And the balance of the important bridges were detailed but not written up, because there was about 125 more of them, but the "122" represent the details of the bridges.

Q. Well, those 122, were they prorated into this table, that is the value of the 122, as you have given it here, prorated into this table Ex. 24, or were they simply put in at the aggregate value of the 122?

A. At the aggregate value as shown there.

Q. And will you show me where in your total value of the line the value of that 122 bridges is entered?

A. Right there, (pointing) that and that and that makes that.

Q. Now, I suppose the length of those bridges, although it would be only a few miles—four or five miles—was not taken out of the 5,785, but your valuations here include the valuation of the miles covered by bridges?

A. If it were a long bridge, like the Columbia river, which is half a mile long; the Clark's Fork of the Columbia river at Sandy Ridge, which is about half a mile long, we only included a half a mile of the classified railroad in it. If it were short, three or four, or four or five hundred feet long, we allowed a full mile for the classified material.

Q. So that, in the case of the long bridges, there was no duplication in that?

A. No; but if they were short ones, there might be a little duplication to that extent.

Recess until 2 P. M.

AFTERNOON SESSION.

Q. As I understand your Ex. 25 and your Ex. 24 and your testimony with reference to these valuations, no part of the amount which appears upon the second sheet of Ex. 25 for tunnels, or ballasting exclusive of terminals, and no part of that which appears in the following sheets under the head of Some Large and Important Bridges, nor any part of that which appears in that exhibit under the head of Large and

Important Terminals exclusive of lands and items included under other headings, and no part of any of the items Right of-way, Depot Grounds and Real Estate, or other items on the last page of that exhibit, are included in your values as given for the construction of the 5,785 miles of railway on the first page of Ex. 25?

A. If the bridge were a short one?

Q. Well, excepting in the few cases where there were short bridges less than half a mile.

A. Or if the tunnel were a short one, three or four hundred feet, we would pay no attention, would make no deduction for a short piece of that kind.

Q. Then there were—

A. I might add that there is no prorate per mile for any land in that Ex. 24.

Q. No prorate? I don't know what you mean by that.

A. In your question you asked me if there was any land value included in that 5,785 miles, and there is none, and there is none that shows in the prorate per mile on Ex. 24.

Q. Oh, yes, for lands?

A. Yes, sir.

Q. And for the values given on the first page of Ex. 25, there is no prorate for lands, nor any of these other items which I have just mentioned as shown in Ex. 25?

A. Only if they were small in length, either of tunnels or bridges, short in length.

Mr. How: And then they were not duplicated?

WITNESS: Well, they might be a little, they might just to the extent of that; but if you will bear in mind that of the five miles of tunnels on the road there is two miles in one tunnel alone, and in several other cases there are long tunnels in which we made a prorate, so that it reduces the number and the lineal feet of tunnels that it might be duplicated to a small number and short length.

Q. And the great majority of the bridges that you have valued separately are short bridges, that is, the great majority in number of them?

A. A great many of them. The longer ones were taken out.

Q. Now, in this roadway in Minnesota, which you read your classifications for this morning, between the yards of Northtown Junction and the yards at Staples, if we would take the total values for those classifications, as you have testified would be done in the way you made up your figures, and then would add to that for the depots and buildings the amounts which you gave us for Sauk Rapids and Little Falls, and add to that its proportion of the right-of-way or land values, that would give us your estimate of the value of the Northern Pacific between those two points, would it not?

A. Oh, no.

Q. Well, what else would there be included?

A. If your were to take the average per mile of the land values on the Northern Pacific road, it is not at all likely that the rate per mile would be the same as the land values in a settled country like between Northtown Junction and Staples, nor would it properly represent it because of the large value of the land at very important terminals.

Q. If we were to endeavor to get at your valuation of the Northern Pacific line from the north limits of the Northtown yards to the south limits of the Staples yard, we would take the classifications of each mile as you have given them here at the total valuation for that classification on your Ex. 24, and in those cases where they are a part of two classes add them and divide by two, and add those, then we would add to that the figures you gave us this morning for the depots and buildings which you valued separately at Sauk Rapids and Little Falls; now, what else would we have to add to that to make up the value of the Northern Pacific line between those two points?

A. Its proportion of everything that there is on the line, not enumerated in your question.

Q. Well, what would that be?

A. You would have to take the ballasting.

Q. There would be no tunnels in that, I believe?

A. No, sir.

Q. All right, ballasting?

A. All the bridges and culverts.

Q. That is, all the bridges and culverts which appear in this exhibit under the head of Some of the Large and Important Bridges?

A. Whatever bridges there are in that list would have to be separated out.

Q. Are there any such in that list, between those two stations?

A. They cross the Mississippi river—Yes, sir.

Q. Will you point out which ones there are in that list between those two points?

A. There would be the Mississippi river bridge at Little Falls.

Q. Is that the one that has 106 as the number of the bridge and is valued at $61,460?

A. Little Falls to Brainerd.

Q. Would that be on this list that you have spoken of?

A. No. It shows a double-track bridge of the Mississippi river, and Staples to St. Paul, Mississippi river bridge.

Q. Oh, that is No. 105?

A. Yes, sir.

Q. $47,850?

A. And a double-track, Mississippi river.

Q. Where is the double track?

A. 13-A, just ahead of the other.

Q. $219,340?

A. Yes, sir.

Q. That is between Staples and St. Paul?

A. Yes, sir.

Q. Are there any other bridges in that list that would come in that line?

A. I think not. Not in this specified list, no, sir, but where they have the balance of the important bridges at the end, $2,117,404, that includes some of the important bridges.

Q. Yes, but they were prorated?

A. Not at all.

Q. Under your testimony?

A. No, no; no, sir.

Q. Those are not included in your tables?

A. No, sir.

Q. In Ex. 24?

A. No, sir.

Mr. HOW: Certainly not unless they are duplications.

WITNESS: No, sir. Mr. Durment, here is what it says. If you take that statement here is the letter: "The cost of the balance $8,878,229 includes many large and costly arches, masonry, timber, cast-iron pipe and vitrified pipe, culverts, masonry piers and abutments supporting trusses and girders, pile and timber piers and abutments supporting trusses and girders. This amount $8,878,229, was prorated on a mile basis as follows:"

Q. Then those that are included in the $2,117,404 were not prorated?

A. The $2,117,404.

Q. Can you, from either the exhibits in evidence, or from the notes you have in your books there, give us how much of that $2,117,404 is between the points I have mentioned in Minnesota, and where?

A. I don't think I have got enough to do it here. I will see. (After examining) I think Elk river, on mile 39, was one.

Q. And what was the value of that?

A. I can't tell you that here.

Q. Well, I will ask you, then, if you have the information, when you get at it, to give us an itemized statement of the bridges between these points that you have testified to, on the Minnesota line, and your values of them which are included in that $2,117,404.

A. I can send it to you.

Q. That is all right, make it and send it.

A. I will send it to Mr. How so he can hand it to you.

Q. That will be all right. Now, before we leave the bridges, I am told that the engineer for the State says that this double track 13-A here $219,340, which you say is between Northtown Junction and Staples, is the bridge at St. Paul.

A. Well, I will tell you what I will give you: Of course it was all new to me,—the Northern Pacific was, and I may be a little rusty in that respect, because there are so many Mississippi river crossings, but I will send you an exact statement which Mississippi river bridges they were.

Q. In this list?

A. Yes, in that territory; and which large bridges were included in that little over two million dollars. I will give you each one and the estimated cost of each one.

Q. Well, that we want.

A. I will send that to Mr. How, so there can be no contention about it.

Q. But the particular matter I call your attention to now is the list of large and important bridges which is included in the nine-million-dollar item.

A. I will send you that, too, so that if I am mistaken and Mr. Morgan is right—he is undoubtedly right because I may be a little confused on account of the large number of Mississippi river bridges—but I will see that you get the num-

ber, the length, and our estimate of every one of the important bridges between Staples and Northtown Junction included in that little over eleven million dollars.

Q. That is what we want.

A. I would like to add that, in so far as I may have testified to Mississippi river bridges, it is liable to correction with this letter that I send you.

Q. Certainly, that is understood. Your list will be your final testimony as to those bridges?

A. Yes, sir.

Q. Now, if you will turn to the next page there, we have "Large and important terminals exclusive of land and items included under other headings." You have given us, as I understand it, the values of these "Large and important terminals exclusive of land and items included under other headings" at Sauk Rapids and Little Falls as being the only items in that list which would come within the Northern Pacific line between Northtown Junction and Staples; am I right?

A. Yes, sir.

Q. And no other item in that would be chargeable to any part of that line between Northtown Junction and Staples?

A. I think not.

Q. Now, taking the last page of this sheet as to the items here under the head of right-of-way, depot grounds and real estate, we have here a number of them at specified locations, aggregating something over seventy-five million dollars, none of that seventy-five million dollars would be chargeable to any part of the line between Northtown Junction and Staples, as I understand it?

A. No, sir.

Q. If we were to attempt to make up your value of that portion of the Minnesota line which we have spoken of from the exhibits you have placed in evidence here, would there be any part of this $31,337,986.66, the excess value of the

terminals,—I mean of the right-of-way and depot grounds—over the 75 millions for specified places to be added to the figures which we have already?

A. Yes, sir, you would have to add the value of all the lands between those points.

Q. Then the values of the miles of classes A, B and so on, which you have given in your exhibit, does not include any portion of that $31,337,986.66?

A. No, sir.

Q. You take this total value of $106,875,617.20 for right-of-way, depot grounds and real estate; that is the value given you by the land department of the road, I believe?

A. Yes, sir.

Q. And that total does not represent your own estimate or opinion formed from examination of it?

A. No, sir, only in an indirect way: that I did figure out and have noted in the letter an indirect way of getting ahold of that, and it is brought out very clearly as to what it amounts to, and in my opinion the $31,000,000 odd is not in excess of what the land is worth.

Mr. HOW: You mean by the "letter" Ex. 26?

WITNESS: Ex. 26, yes, sir. When I speak of "letter" I simply mean the letter of explanation.

Q. Ex. 26?

A. I think that is the number.

Mr. HOW: Yes, sir, Ex. 26.

Q. And then, in making up the total value of that part of the line in Minnesota that you have been speaking of, we would have to add to these other figures that you have mentioned before, the value of the right-of-way between those points?

A. And station grounds.

Q. And station grounds?

A. Yes, sir.

Q. Have you any notes or figures from your inspection showing what valuation you placed upon that right-of-way between those points?

A. I did not place any value on any land.

Mr. How: In particular, you mean?

WITNESS: On any of it. In fact, it was wholly secured from Mr. Cooper.

Q. Then there would be nothing to be added beyond the items we have specially mentioned here to arrive at the value of that portion of the line in Minnesota?

A. I can't tell you that positively. You are getting down to a pretty close range—

Q. Yes, I know.

A. —and there may be some things on that line that a more minute examination, or in some of the items that I have got, that should be added to that portion of the line. I would like to have you bear in mind that I was not treating just one branch, but all of the lines.

Q. You have read to us your classifications according to the classes shown in Ex. 24 for the line between Northtown Junction and Staples; the values of the construction of the road between those points for the matters included in the classifications on the schedule would be found by adding the amounts for each mile according to the classification shown. Now, it appears from your testimony that in getting the true value of that line there are other matters shown in Ex. 25 not included in the classification as shown in Ex. 24 which would have to be added; for instance, you say that there are no tunnels in that line and nothing would have to be added for that, but you would have to add the proper amount or value of the ballasting on that line between those points, you would have to add the proper value or amount for those bridges on that part of the line which were included in the two items $9,349,301 and $2,117,404; also the amounts

found under the head "Large and important terminals exclusive of land," etc., on the next page under the head of Sauk Rapids and Little Falls; and also that part of $31,337,986.66, right-of-way, which is the value of the right-of-way and station grounds between those points. You would have to add that too, would you not?

A. Yes, sir.

Q. Now, is there any other thing in that Ex. 25 which would have to be added to arrive at the value of that part of the line in Minnesota between those points?

A. Yes, sir.

Q. What is it, please?

A. Shop machinery and tools, miscellaneous buildings, snow-fences, etc.

Q. Aren't those miscellaneous buildings in Ex. 24?

A. Let me see. (Examining exhibit.) Why, I should say as to this, that as we went along if there was anything unusual in the way of rip-rap, dikes or an unusual construction, like over a marsh, we made special allowance for that; so that, in addition to that rate per mile on Ex. 25 there may be some other items between those two points that we might have to add.

Q. But may I inquire, didn't you make your allowance for those things by increasing your classification?

A. Not always so, no, sir.

Q. Not always so?

A. Oh, no.

Q. Then make a note of this, will you please; I will ask you to furnish us an itemized statement of all such allowances as you made between those points for any of those matters just mentioned, not included in your classification, and to state where in Ex. 25 those particular matters appear or are included.

A. In Ex. 24 there is no item of telegraph lines in it on a

prorate per mile.

Q. No, but let us dispose of these miscellaneous buildings first.

A. I will send you any items that I may have that are extra.

Q. What I want to get at is, it appears on Ex. 24 you have included for miscellaneous structures, under the first three classes, $148 a mile, and under the others $296 a mile. My recollection is that you told us you prorated that by taking the total and prorated upon a mileage basis, and, as I remember it, the total was approximately this figure; in other words, it was $1,900,000.

A. Well, if there is anything extra I will give it to you; if not, it is covered by the prorate per mile. I will give you that.

Q. Unless you are able to give us something extra, then the prorate per mile covers all miscellaneous buildings in this part of the line?

A. I think, Mr. Durment, that you are making it a little confusing.

Q. Well, I may be.

A. Because—

Q. It is somewhat confusing to me.

A. It is a little to me, but when you separate any one piece of line and undertake to use my prorate basis, it is hardly fair, because you have selected a line on which there is a heavy business, and you have taken the same prorate that I have used on the whole road where there may be more or less, so that it is hardly a fair statement to take those prorates per mile that I have made, that are not certain quantities, and apply it to any one particular piece of line.

Q. Well, that is a matter of argument.

A. Well, I am only giving you the reason why.

Q. But I will tell you where I think there may be some

difference between us, and what I want to make clear; there is a certain amount for miscellaneous buildings which you testified yesterday you had prorated and that taking the number of miles of each of your classes to be as you have given it on the first page of Ex. 25 at the rates given in your table Ex. 24 for miscellaneous buildings would give you the total value of miscellaneous structures.

A. I made my explanation, and if there is anything more I will send it to you. I don't consider, when you separate any piece of line from the whole that that average applies.

Q. I am not asking you to consider that, I am asking you to listen to what I want in explanation on that now. Now, that much of your miscellaneous buildings was included in your tables by the prorate?

A. Yes.

Q. And there was a charge against this particular line to the extent of that prorate for miscellaneous buildings?

A. Yes.

Q. In arriving at your classification and values upon that?

A. Yes.

Q. Now, what I want to know is this; whether this $1,843,068, miscellaneous buildings, is something other and different from the miscellaneous buildings which you have prorated and included in Ex. 24.

A. Let it stand that way, that is prorated on the basis of the mileage of the whole System, those items are prorated on a mileage of the whole System. That is my answer to that.

Q. Then this is really a duplication?

A. No, not at all. I can answer you this way: that $1,843,068 is divided by 5,785 miles, which makes a prorate. Now, as explained before, for the three classes A, B and C, we made it one-third, and the others two-thirds of the amount; so that in the aggregate, for all those prorates on miscellaneous buildings, it is equal to the amount named.

Q. Then if we take the values for each mile of each of your classes which you have for the total 5,785 miles and add them, we have included in it this $1,843,068?

A. Yes, sir. Answering your question, there is no prorate per mile for the telegraph line, and that will have to be added, the value of that.

Q. Now, what is the total value of the telegraph line?

A. $1,445,013.

Q. Then of that figure of $1,843,068, there is $1,445,013 which is not included in the prorate?

A. Oh no, no, you have got it mixed there. The telegraph line belonging to the Northern Pacific Railroad is estimated at $1,843,068 for the whole road. I don't know what you mean by bringing in $1,445,013.

Mr. How: You have got the wrong figure. $1,843,068 is miscellaneous buildings.

WITNESS: The telegraph lines is the next line below, $1,445,013.

Q. Oh, then I understood you to mean that this value of the telegraph line was included in your Miscellaneous Buildings on this exhibit.

A. Not at all.

Q. Oh, then I see.

A. It has a separate value.

Q. That is the next thing additional in this exhibit which a part of would have to be added to the line between Northtown Junction and Staples?

A. Yes, sir.

Q. I suppose you made no values or estimates showing the value of the telegraph line between those two points?

A. No, sir. You will have to add a portion of the General and Organization Expenses. You will have to add a proportion of the Additional Freight Charges on Foreign Lines.

Q. You didn't estimate any of those or apportion any of

that to this line between those points?

A. No, sir. You will have to include a share of the Legal Expenses.

Q. And you don't know, you didn't make any estimate of how much that would be?

A. No, sir. You will have to include also, its proportion, of Contingencies, Engineering and Interest.

Q. You didn't take any of those?

A. No, sir.

Q. Now, I notice here that you have charged ten per cent contingencies on $212,155,575.24.

A. Yes, sir.

Q. I take it that that includes the $197,558,201.40 brought forward at the top of that page?

A. Yes, it includes that.

Q. Now, then, will you please tell us what other items on that page are to be added to that amount brought forward to make this total sum on which you figure your contingency?

A. Do you want contingencies first?

Q. Yes.

A. The contingencies are figured on the price per mile of road.

Q. Well, that would be included in the $197,558,201.40, wouldn't it?

A. I will just keep track of that as we go along.

Q. If you have it itemized that way, I will take it that way.

A. I have. It includes ten per cent on $140,808,330 cost of the construction of the road; cost of tunnels, $4,545,938.40; ballast, $9,659,250; bridges, $20,344,934; terminals, $22,199,977.59; Kalama ferry, $617,000; machinery and tools, $1,100,000; dredging seaports, $500,000; general office buildings, $756,600; miscellaneous buildings, $1,843,068; telegraph lines, $1,445,013; general and organization expenses, $578,500; additional freight charges, difference between four mills a ton

a mile and tariff, $1,829,562; Duluth union depot, $597,545.25; St. Paul union depot, $610,572; Minnesota Railway & Transfer Company, $575,600; Lake Superior Terminal & Transfer Company, $117,000; Northern Pacific, Portland, Oregon, Terminal Company, $1,200,000; Seattle union depot, $2,826,695. Making a total of $212,155,575.24; ten per cent of which is $21,215,557.52.

Q. Then for your contingencies you charge on buildings and structures and ties and rails and fastenings and everything that can be seen, as well as those where you have to make estimates for grading and tunneling?

A. Yes, sir.

Q. Did you make any notes or anything in your inspection which would enable you to say what was the value of the ballasting on the line in Minnesota between Northtown Junction and Staples?

A. No, sir.

Q. My recollection is you said on your examination in chief that there was only a part of the ballasting which you saw and that you figured in the rest of the ballasting upon the basis of proper ballasting.

A. Where?

Q. Well, on the line at large, I understood you to say.

Mr. HOW: No.

A. No, sir.

Mr. HOW: He didn't testify to anything of the kind.

WITNESS: No, sir.

Q. How much of the ballasting did you examine or see on the System which you have included in your figures given for ballasting?

A. On the whole road?

Q. On the whole line?

A. I saw everything that I traveled over, plus the statement of the local officials, confirmed by the records and charts

in the chief engineer's office in St. Paul.

Q. Does that mean that you made up your figures as to the entire amount of ballast from the records in the office of the chief engineer and the information there obtained and then inspected that only on the lines over which you went; is that right?

A. Yes, as a whole, but the chief engineer's office records were confirmed, or even added to by the statement of the local officials in charge of those lines that I did not go over.

Q. Oh, yes, but your value for the line you didn't go over included in this is based upon the records of the chief engineer's office as confirmed by the officers in charge of the branches you didn't go over?

A. Not value, only distance.

Q. No, as to the amounts or distances of ballasting?

A. Yes, sir, as to the distance.

Q. As to the values, you fixed that yourself?

A. Yes, sir.

Q. And you fixed it upon the basis of it being a standard ballast?

A. Yes, sir; that is, standard for that class of lines that they described.

Q. Well, now, then, we find also here in your exhibit 25 that you have classified, according to the classes of Ex. 24, every mile of main line on the System, amounting to 5,785 miles; you in fact inspected only 3,396 miles; that leaves 2,389 you did not inspect. Now, on what information did you classify this 2,389 miles?

A. Opinions of the local officials and the records in the chief engineer's office.

Q. As I remember, you testified that in making the values of some of the buildings, if not all of them, at the more important stations, and the terminals where you made separate values, your assistant made the values on the grounds?

A. No, sir.

Q. Now, as to what buildings, either stations or terminals, did your assistant make the values instead of you?

A. Not one.

Q. What proportion of this value of $140,808,320 shown on the first page of Ex. 25, is your estimated value of the 2,389 miles which you did not personally inspect?

A. I can't tell you. I mean I can't tell you *now*. I could figure it out.

Q. What information or details as to the ballasting did you find in the chief engineer's office on which you based your estimate for ballasting on those lines you did not see?

A. Their charts showed that, whether it is ballasted or not. I relied more upon the opinion of the local officials, and I arranged on every division I went over, to have one or more of them along with me, and from them I got the information and tabulated it.

Q. Taking this Ex. 25 again, under the head of "Some of the large and important bridges" there is a total of $9,349,301; what of those did you personally inspect?

A. None of them.

Q. On what information did you make up your values of those bridges?

A. I had a record with me of all of those bridges. As we came to them I checked them over, that they were in existence. I handed that list over to the bridge engineer of the Rock Island road with instructions how to estimate them. He went to the St. Paul bridge engineer's office of the Northern Pacific Railroad Company, and he got all the data by which he calculated the quantities, and I gave him unit prices, and by multiplying one by the other he got the total, not only of the nine million—

Q. I am coming to that other as a separate item.

A. $9,349,301, I may save you a question,—and also of the $2,117,404.

Q. Then in that way you have made up your values and tables under the head of "Some of the large and important bridges," including the items $9,349,301 and $2,117,404?

A. Yes, sir.

Q. I suppose you didn't inspect personally the other bridges, culverts and the like, amounting to $8,878,229, being the last item shown on Ex. 25, page 5?

A. No, I did not.

Q. You were not present in St. Paul, yourself, working with the bridge engineer, at the time he examined these records in the Northern Pacific and got his information from which he made these figures, were you?

A. No, sir.

Q. You simply told him the prices to use and the methods to pursue?

A. Yes, sir.

Q. And then he came here and went to their records and their departments and got that information and made the figures?

A. Yes, sir, made that estimation.

Q. Made the estimates?

A. Yes, sir.

Q. And you took his estimates as he furnished them to you?

A. Yes, sir.

Q. Now, on the second sheet of this Ex. 25 we have several items under the head Tunnels, aggregating $4,545,938.40. How much of that tunneling did you personally inspect?

A. I saw every one of them.

Q. And you yourself examined them in such a way as to know the dimensions and the amounts that you could figure this amount aggregating $4,545,938.40?

A. Yes, sir. We saw that they were single-track tunnels, of the usual section for that type, how they were lined, single or double-track, and multiplied it by the unit value for the work in building a tunnel.

Q. And the number of units could be determined from the dimensions which you saw were there, or did you take your dimensions from the records, or some official, of the road?

A. No, sir, first checked it as a single or double-track tunnel.

Q. But you had to get your dimensions, did you?

A. Well, I could tell whether it was a standard-size tunnel or not.

Q. Could you tell the length of it?

A. Oh, no, I took the records of the office for the length of it; saw whether there was approximately that much, saw whether it was lined with timber or wood, according to the records.

Q. Then did you check up these figures, after they were made, so as to know they were right, on the tunnels themselves?

A. I didn't take the figures of anybody else, except the length, from the records.

Q. And then you made your own figure on the tunnels in here?

A. Entirely so. That is brought out very clearly, in detail, in Ex. 26.

Q. Then as to the tunnels, you got the length from the records of the Railroad Company?

A. Yes, sir.

Q. And then inspected the tunnel yourself and satisfied yourself approximately, at least, that the records were right?

A. Yes, sir.

Q. Then you yourself made the computations, applying what you knew to be the unit values, and arrived at these

figures which you have given us in this exhibit?

A. Yes, sir.

Q. I suppose that the inspection you made of that was simply going through on the train and looking at it as you went through, or did you get out?

A. That is what I did, going through on the train.

Q. Now, as to these "Large and important terminals, exclusive of land and items included under other headings," did you make a personal inspection and a personal valuation of all those, as shown on the sheet so headed?

A. No, sir.

Q. In Ex. 25?

A. No, sir.

Q. Did you make a personal inspection of any of them?

A. Yes, sir.

Q. What ones?

A. A careful personal inspection of Duluth and Superior, St. Paul, Minneapolis, Spokane, Tacoma and South Tacoma, Seattle; Butte I was familiar with and only looked over a part of it; Bellingham, South Bend, Aberdeen and Hoquiam, Stillwater, Missoula, Billings, Forsyth, Glendive, Staples, Dickinson, Livingston, Logan. Those I personally went over, and of a number of the balance I got notes of what I could see while the train was standing at the station.

Q. And on what information did you make up your values for those on this line which you did not personally inspect?

A. The station plats, on file in the chief engineer's office, were handed to us; we had the notes that I took, checked them off and took all of the improvements and got a value for them according to the unit prices that I established for the various types of work on each station-ground.

Q. And did you make up these figures shown on this exhibit for those matters?

A. Yes, sir.

Q. In the cases where you did not personally inspect the buildings as you have testified?

A. No, sir.

Q. Or were they made by someone else?

A. Made by somebody else.

Q. By whom?

A. By two men whom I delegated to do the work.

Q. That came here and did it at the Northern Pacific offices here, I suppose?

A. Yes, sir.

Q. From the records they found there, with your notes?

A. Yes, sir.

Q. And gave you the figures, and you carried the figures into this exhibit?

A. Yes, sir.

Q. You were not present overseeing them when they made the figures?

A. No.

Q. Now, as I remember, you say you spent half a day, I think it was, at Duluth and Superior?

A. Yes, sir.

Q. And you made your valuation there in that half day?

A. Well, from noon to about 8 o'clock when it got dark.

Q. From noon to about 8?

A. About that.

Q. And you took a day to St. Paul and Minneapolis?

A. Yes, sir.

Q. For Spokane you took a day, I think you said?

A. No, I was there about a half a day.

Q. A half a day for Spokane; and for Tacoma?

A. I was there a whole day. That is, I got through by about 3 o'clock in the afternoon.

Q. And Seattle a day, I think you said?

A. I took a whole day there.

Q. How long at Missoula?

A. Well, I was there two different times at Missoula.

Q. And at Staples?

A. We were there about, I think, four hours.

Q. And Dickinson?

A. Two days. I think you ought to understand that I was delayed there, on account of a wreck, so that I couldn't go West. That was the two days I was there.

Q. I didn't suppose it would take you that long to make the valuation.

A. Oh, no. I was there two days.

Q. If you were there two days you could make a more careful examination if you saw fit to?

A. No, I think I cleaned it up in about an hour. I only devoted an hour to it.

Q. As to the figures for these particular larger terminals which you testify you did personally inspect, who made up the figures as they are carried in these exhibits, you yourself personally, or these men to whom you delegated the job?

A. The men that I delegated it to, as a whole. There were a few exceptions, like at Duluth, that I told them what to put down as to the values, and I helped Mr. Beye, my assistant, to calculate all of the improvements at Duluth. That is the only one of them that I went over, from one end to the other, myself.

Q. And I suppose these figures as finally made for the others, by these men to whom you delegated it, were made up not only from the information you gave them yourself but also from the plats and records of the Northern Pacific office?

A. Yes, sir.

Q. That gave them the dimensions of the buildings and a number of things of that sort, I suppose?

A. Yes, sir, and not only that, but it gave them, in many places, the cost of things by which, if I had placed a value on

them, they could see whether my valuation was—that the record valuation was near what I thought it was worth on the ground.

Q. And in case they did find that there was a discrepancy between your valuation and the record valuation, what did they do?

A. Took my valuation for it.

Q. And in case—

A. I might illustrate it like this; as an illustration, I might go to a place and find a turn-table in there that was a bang-up good one in every respect; the records might possibly not be posted up to date and might show a cheaper class of table, so my figures were taken.

Q. But you only gave figures, unit values, as to those men, to make up?

A. Well, all over the road, wherever I took notes, you see in dollars and cents, opposite it, just what I told him to put down, absolutely.

Q. There were instances where you did in your notes fix the price and that they carried in?

A. Yes, sir; there is an illustration right there at that place (showing counsel note-book).

Q. I had noticed this morning some of them, the same thing, so I knew what you meant when you spoke. Take now the right-of-way depot grounds and real estate, there are fifteen here specified, where there is given an aggregate value of $75,537,630.54; I don't remember whether you said that was the value you fixed on it, or the valuation which was given you by the Land Commissioner's department.

A. The valuation given me by the Land Commissioner.

Q. And you didn't make any personal estimates of the land values, then, at all?

A. No, sir.

Q. This Ex. 25 shows that you have given the valuation of

this road as of June 30, 1906. Something in your testimony in chief (I think the first day you were on the witness stand) gave me the impression that in your total valuation, as given here in Ex. 25, of $395,376,749.40, you had included some things which had been added to the road since June 30, 1906.

A. Not with my knowledge.

Q. As I remember, you made that valuation for the Spokane rate case in March, 1907, or thereabouts.

A. Yes, sir.

Q. And you didn't make any personal inspection of the line in making that valuation?

A. I did not.

Q. That valuation was made for what purpose, did you say?

A. For the Spokane rate case.

Q. So you said, and I suppose I ought to know all about the Spokane rate case, but I don't. That, I understand, was a hearing before the Interstate Commerce Commission, in which the railroads thought it necessary or desirable to show the value of the Northern Pacific System, was it not?

A. No.

Q. Well, what was that?

A. It was the people of Spokane who wanted an estimate furnished of the value of the railroad so that they might see if the rates were right or fair.

Mr. HOW: It was a hearing before the Interstate Commerce Commission?

WITNESS: And the testimony was given before the Interstate Commerce Commission.

Q. But it was in some sort of a hearing before the Interstate Commerce Commission, where the railroads were showing, or attempting to show, the value of the Northern Pacific System?

A. Yes, sir.

Q. And you made your investigation and calculations for the purpose of testifying as to that value in that hearing?

A. Yes, sir.

Q. And you did make an estimate or form a judgment, at that time, as to the value of the System and testified to it before the Interstate Commerce Commission?

A. Yes, sir.

Q. And when you speak of the figures or estimate you made in the Spokane rate case you mean the estimate which at that time represented your judgment of the value of the System or the various items which you valued and to which you testified in that hearing?

A. Yes, sir.

Q. Now, will you please tell us on what information you made your valuations in the Spokane rate case to which you testified as the value of the System, or the different parts of it, in that hearing?

A. On the question as to the value of the shops, machinery and tools, got a lump sum from the superintendent of motive power and machinery, and the value of the telegraph line, the mileage and the value of that; got from the land commissioner the amount and value of the lands; from the comptroller's office the value of any interest that they had in any other properties included in that estimate; from the chief engineer's office quantities and sizes; and I used the prices that I had been accustomed to use to get the value of those.

Q. And in that way you made up that information for that case?

A. Yes, sir.

Q. That was practically all made from the records of the Northern Pacific office as to quantities and dimensions; as to value, of course, you used your own figures except where these particular officers you speak of gave you the values?

A. Well, not quite that. The quantities in the roadbed

were a record of a good many bridges on a narrow roadbed. I questioned Mr. Darling as to what his section had been enlarged to, and he told me; so I spent a good deal of time in calculating what the difference might be, in a general way, of an increase in quantities due to the widening of the fills and the widening of the cuts to conform to the condition of the road at that time.

By Mr. O'BRIEN:

Q. I just wanted to ask you, Mr. Berry, as to the general features of the Northern Pacific System. The expensive construction, as a rule is, on the western part of the system, is it not?

A. The grading, yes, sir; the bridging I am in doubts about.

Q. Well, in your details you have given the location of these large bridges.

A. If you will draw a line somewhere, I can make a better answer on that. I mean if you will draw a line of the geography of the country between a point—

Q. What I mean is, that in this detailed statement of the "Large and important bridges" you have located each large and important bridge, so that it can be told, from examination of that, on what portion of the line that is located?

A. Yes, sir.

Q. So far as grading, however, is concerned, the Western portion of the line is by far the most expensive, is it not?

A. Won't you draw the line there and say west of where?

Q. I would much rather have you do it yourself, you are more familiar with it than I am.

A. Well, I am not very familiar with it. You must bear in mind, that is the only trip I ever made over the Northern Pacific. If you will draw the line I will answer it.

Mr. HOW: He wants to know what you mean by "western," I suppose.

WITNESS: Yes, sir.

Q. After you reach the portion of the country where the sharp increase in elevation commences, you reach the most expensive portion of the grading of the road, do you not?

A. Yes, sir.

Q. Now, that high increase commences of course, many miles from the Rocky mountains?

A. Well, the heavy mountain work that you speak of is west of the west line of North Dakota.

Q. Yes, but before you reach what you call the actual mountains, there is a considerable increase in elevation, is there not?

A. Yes, sir.

Q. All through the western part of Dakota the construction is rather expensive, is it not?

A. Well, not as a whole, no, sir.

Q. How it is through the Bad Lands, for instance? Is that expensive?

A. Well, that is a rolling country; that is expensive.

Q. That is rather expensive?

A. Yes, sir. That is, the western half of North Dakota.

Q. Along the Yellowstone in Montana?

A. It is, in places, very expensive.

Q. And then, after you reach the first range of mountains, from there to Spokane is quite expensive, is it not?

A. Yes, sir.

Q. Then there is a stretch of road from Spokane to the Cascades, across the Yakima valley; how is that?

A. Well, that is not such heavy work. It is a rolling country, however.

Q. Then you reach the Cascade mountains, and from there on to the terminus of the line it is very expensive, is it not?

A. It is very expensive until you get to Auburn, where you diverge, to either go south to Tacoma and Portland or north

to Seattle. The line is not a heavy one between Tacoma and Seattle.

Q. That is a very short distance, between Tacoma and Seattle, it is only about twenty-five miles?

A. It is about 42 or 43 miles.

Q. From Tacoma to Portland is again in heavy construction, is it not?

A. Yes, sir, it is heavier.

Q. Now, this branch you spoke of through from Missoula to Wallace, is very heavy construction?

A. Yes, sir, most of the way it is very heavy.

Q. The crossing of the Iron mountain is quite a grade, about four per cent, if I remember?

A. I think there is a little four-per-cent grade there, right at the top of the mountain.

Q. And a great many high and expensive trestles?

A. Yes, sir.

Q. Now, if you take the west line of Minnesota, or take the entire line in Minnesota and compare it with the entire line outside of Minnesota, would you not say that the cost of constructing the road outside of Minnesota was more per mile than in this state?

A. Well, I should think it might be, the Simon-Pure-grading part of it, that is all.

Q. That is, excluding land values and terminals?

A. Oh, no; no, *sir!* I can't agree with you there.

Q. I say excluding all those. You said Simon-Pure grading?

A. Yes, sir.

Q. Wouldn't that exclude land values?

A. I thought you said including.

Q. No, excluding.

A. Oh, excluding?

Q. Excluding all those elements, it would be more; now

would you give your best judgment as to what per cent of difference there would be?

A. Oh, I have no idea of it at all; not the least.

Q. You couldn't estimate that?

A. Oh, no. There is a large item of bridges and culverts, of over eight million dollars,—I think that the eastern end of the line has the largest proportion of those—and, in many cases, archculverts, that have cost a great deal of money, so that I don't think I could do justice by making an answer to that question.

Q. Well, now, of course, the proportion of bridges and culverts would be increased in a rolling country over a flat country, would it not, ordinarily.

A. Yes, sir.

Q. And you have located all of the important bridges in your tabulation so you confined your statement—and I understand you to do that yourself—to the grading proper?

A. Yes.

Q. Can you give your best judgment as to what per cent of increase per mile for grading proper?

A. No, sir; I have no means of knowing.

Q. Outside of the State?

A. No, sir, not at all.

Q. And in this statement of yours you have made no attempt whatever to segregate the Minnesota value?

A. Not any.

Q. Except where it appears in the details?

A. I paid no attention to any state at all.

Q. Your value is on the theory of the line as a whole?

A. Yes, sir.

Q. But, of course, in arriving at that value, as a whole, you necessarily had to establish a fair basis for each item, had you not?

A. Yes, sir.

Q. And so your estimate as to grading in Minnesota, is your best judgment as to the value of that grading, is it not?

A. Yes, sir.

Q. And your estimate as to the cost of grading of any particular section of the road, is your best judgment as to the cost of grading that particular section?

A. Yes, sir.

Q. And while you don't claim, possibly, absolute accuracy for it, you do claim that it is a fair representation as to the value of that particular section?

A. Yes, sir; not only that particular section, but my judgment as to the value of the grading of every mile.

Q. Yes, of each mile. So that the correctness of your total estimate depends, of course, upon the correctness of the detail estimates which you made, does it not?

A. Yes, sir.

RE-DIRECT EXAMINATION.

By Mr. How:

Q. Mr. Berry, you have testified pretty fully, and perhaps clearly enough, about the design of your original plan or the plan of your original design, the frame of your original plan, and I understand that you changed the form of that after you started upon your inspection; the plan is shown in your Ex. 24; the upper half shows the quantities in particular classes, which you have set forth, and the lower half shows the cost of handling or providing those quantities or dealing with those quantities as the case may be. Now, which of the prices in those respective classes remain unchanged? I mean by "prices" the figures set opposite the respective items in the lower half, beginning with grading, including clearing, grubbing and rip-rap.

A. If you accept the classification that I make, the constant quantities are grading, ties, rail, track-fastenings, track-

laying and surfacing. That is all.

Q. Now what do you mean by if we "accept the quantities" you make? I am asking merely with regard to the prices applicable to those quantities.

A. One man might go over the line and make a different classification from what I do, and if you accept the classification and the miles of each kind that I made, then that quantity would be a constant item.

Q. But the prices that you applied are set forth in your Ex. 26, what you have called generally your "letter"?

A. Yes, sir.

Q. In what respect did those prices set forth in Ex. 26 change between your old plan and the present plan, Ex. 24?

A. In only one particular; and that was the increase in the amount of rail in sidings per mile of road.

Q. And that increased why?

A. Because the ratio that I started out with I found afterwards, when I came to balance the account of side tracks, was not high enough.

Q. And your unit of prices did not vary at all? I am talking about the unit of price set forth in your "letter".

A. Not in any respect.

Q. Now, Mr. Berry, let us suppose that, instead of making this plan as set forth and shown in Ex. 24, you had made a plan in which the grading, the ties, the rails, the track-fastenings, and every other item shown on the lower half of Ex. 24, and the main bridges, the tunnels, the ballasting, the terminals, and every particular item set forth in your Ex. 25, had been estimated separately and the totals of those estimates aggregated, what would have been the result as compared with the result which you have reached in your total of Ex. 25?

A. Not anything.

Q. Not in result?

A. Not any difference, the result would have been just the same.

Q. What would have been the result if, instead of making a separate item of terminals and of important bridges of tunnels and of ballasting, you had prorated those over the entire mileage, in the same way that you prorated fencing, right-of-way and other items, including water stations, grain elevators, etc., and then added the totals?

A. The result would have been just the same.

Q. You mean the result of your total estimate would have been exactly the same?

A. Yes, sir; you might specify it as $395,376,749.40. It would have been that result.

Q. With what purpose did you make this plan Ex. 24? for your own assistance in making your estimate, or for the assistance of other people in making their estimate or in following you?

A. It was wholly made for my own use. But the upper half I had always supposed they would want to know upon what basis we got at the quantities and classification of the roadbed. The lower half, in some of those items that are prorated per mile, I took what was common on many railroads. And I was a little curious, after working out the value of the buildings, to illustrate, on the terminals, and deducting that from the total amount that I used in the Spokane rate case, to see how I compared with the estimation I made in the beginning; and when I had got that far I thought it would help me very much to put that right down there and get a total at the bottom, the mile for those various items, and multiply it by the miles; which (as time was valuable) I did in that way.

Q. I think you have testified, but I will ask you again, whether or not you intended to represent in your Complainant's Ex. 24 that any mile of track in the Northern Pacific

System has $23 worth and no more of shops, roundhouses and turn-tables upon it?

A. No, sir, I don't say that.

Q. Do you intend to represent in this exhibit, or in any exhibit, or any testimony, that any ten miles has $230 worth of shops, roundhouses and turn-tables, and no more?

A. No, sir.

Q. What reference, if any, have the items other than those which you particularly mentioned as fixed items, that is to say, frogs and switch-fastenings, and right-of-way, etc., to any particular identical mile of the Northern Pacific System?

A. Nothing; nothing.

Q. What relation were those figures ever intended to have to any particular mile of track?

A. None.

Q. I understood you to testify that you had not made any inspection of the main bridges which are separated from the plan in Ex. 24 and set forth specifically and separately in Ex. 25. You saw those bridges, I take it?

A. Yes, sir.

Q. What method could you have adopted in order to get full details of those bridges without taking your information from the chief engineer's office?

A. I would have had to measure, get at all the details of the construction and quantities.

Q. How long would that have taken you in a bridge like the bridge over the Missouri river at Bismarck, for instance?

A. Well, with the river protection and everything, alone, it might have taken me—might have taken a month.

Q. A month for that one bridge?

A. That is, if you wanted to get at the weights of every member and determine every feature about that bridge and its protection.

Q. Now, after you had estimated these particular bridges

and obtained the $9,349,301 as the value of them by having applied the plan and having calculated the figures under your instructions as you have testified, you had the balance of the important bridges $2,117,404, did you see any important bridges other than those included in this particular description in Ex. 25?

A. Yes, sir, I had a chance to see a good many of the structures as we passed over them included in the $8,000,000.

Q. I am talking about the important bridges, $2,117,404.

A. I saw all of the bridges included in the $2,117,404.

Q. Did you see enough of them so that, in the light of your general experience, you were able to form any opinion as to whether they ought, reasonably, to cost that amount to construct at the present time?

Mr. DURMENT: We want an objection there, on the ground that the witness has not shown himself competent to testify and his opinion is of no value. We don't question his general qualifications as an expert to pass upon questions of that sort, but the basis of our objection is that it appears from his own testimony that he has not sufficient knowledge of these bridges with reference to which the counsel is now asking him to give an expert opinion.

Q. (Adding to the last question): That is to say, $2,117,404?

A. Yes, sir.

Q. What is your judgment in that regard?

Same objection as last above.

A. I think they are worth what it says.

Q. Now, with regard to the "Balance of all kinds of Waterways, such as stone arches, cast-iron pipe, vitrified pipe, ballast, deck pile-bridges, plain pile-bridges, timber culverts, masonry and box culverts, and all others not included in important bridges, $8,878,229;" what opportunity did you have for observation of these things which I have specified, and

their character?

A. I had the opportunity in the Spokane rate case to take from the Northern Pacific records in general a list of all its bridges and culverts. I applied the prices that were common with me to those structures and arrived at a value of a little over twenty millions of dollars. I did not think it was necessary, after finding out the cost of the important structures, to travel over that matter again, and I arrived at that a little over eight millions of dollars in that way.

Q. Now, I will ask you what opportunity you had to see these various things covered by that $8,878,229 in your inspection.

A. Wherever it was apparent to a man traveling along and looking at it from a train I saw it over the part of the line that I rode; the rest of it I did not see.

Q. Have you any judgment or any opinion as to whether or not that $8,878,229 is a reasonable allowance for the present cost to construct these "all kinds of waterways"?

A. Yes.

Q. What is that opinion?

Mr. DURMENT: We object to that upon the ground that the witness' testimony shows that he has no sufficient knowledge or information to qualify him to express an opinion upon that point.

A. The opinion is based on taking the total cost of the bridges on the whole road and arriving at a value per mile and knowing what similar structures cost on similar lines, that that average was not an extravagant one, and that, included as a part of that whole, was this eight million-odd dollars.

Q. Your Ex. 26 shows prices. How did you establish these prices for the purpose of this estimate?

A. Ruling prices that are current and that we have been paying.

Q. That you yourself have been paying for similar work?

A. Yes, sir.

Q. You have "Track-laying and surfacing, including all expenses for train service and equipment, $950 per mile of track laid, and $25 for each switch." How is that $950 per mile made up, of what items?

A. If the contractor laid the track it included that, the free transportation that we gave him, free use of engines and cars, unloading and loading material at material yards if necessary, repairs to equipment of all kinds, rental of equipment of all kinds—in fact, everything that is contracted for or charged up to that class of work, and is the result of actual cost to both the Union Pacific and Rock Island for that class of work.

Q. Should there be any difference in cost between the Union Pacific and Rock Island and the Northern Pacific, at the present time?

A. Not if it was made on the same basis, no, sir.

Q. What is your judgment with regard to the reasonableness of those figures?

A. Well, I say they are right, because that is what they have cost.

Q. How about ballasting, 75 cents a yard, what have you to say with regard to that price?

A. Well, that is the price we use; it is the price I think that is fair on the Northern Pacific for that class of work.

Q. And is that based upon your experience?

A. Yes, sir; and some very recent, at that, on new lines; which, of course, includes all expenses attendant upon that kind of work.

Q. In your Ex. 24, which is your plan, you have, under the head Miscellaneous Structures, $148 per mile; that is your prorate for classes A, B, and C, and $296 per mile for the balance; then, in your Ex. 25, you have, under the head of

Miscellaneous Buildings, Snow-Fences, Ferry-boats, Barges, etc., $1,843,068. Is this $1,843,068 the same total as would be made by multiplying this $148 and $296, respectively, by the number of miles applicable thereto, as shown on the first page of your Ex. 25?

A. Yes, sir; that is what it is intended to represent.

Q. Then that amount is duplicated; is that the fact?

A. No, sir.

Q. Then you don't understand my question. You have it appearing in this total first, that is, in the $140,808,320, because it is included in every mile that is in here, then you have it again on the last page under this separate heading Miscellaneous Buildings. Are those the same buildings there as are included in the estimate per mile of construction?

A. That is a "stunner" just now.

Q. If it is, it is a duplication?

A. If it is, it is a duplication.

Q. Yes, and I want to ascertain that fact.

A. I am inclined to think that that may be a duplication. I can look it up and advise you.

Q. If counsel are willing to have you.

A. I think it may be a duplication, but this was all hurried through on Monday night so as to get ready for Tuesday morning's session, and we didn't finish until midnight and it may be a duplication.

Mr. How: Are you willing to have him advise you as to whether it is?

Mr. DURMENT: The only objection to it is that I would not be willing to take his statement, simply, that it is not a duplication, without an opportunity to cross-examine him. I should want to know the particular items and amounts which made it up and where he got it, and the particular items and amounts which made up the others which he did prorate, and all about it. Now, if he is willing to make up a full and com-

plete detailed statement of that and of the other which he has included in his prorate and as to where he got his information, so that we may check it up as we could upon his cross-examination, then I would be willing to receive it.

The MASTER: If it is a duplication, that ends it, and if it is not a duplication you want a full detailed statement of just where he gets it and all about it, and that may be satisfactory to you; if it is not, you may want to cross-examine him further; is that right?

Mr. DURMENT: Yes.

Pursuant to the undertaking of Mr. Berry as set forth in his testimony on page 1056 of transcript, he did under date of September 19, 1908, write to Mr. How, counsel for Complainant, as follows, and by consent of counsel herein, the contents of his letter are made a part of the record:

"There is only one bridge over the Mississippi river between Staples and Northtown Junction, and it is the only bridge included in the list where they are specified.

"This bridge is No. 105 consisting of five spans 100 feet each, deck-plate girder, estimated cost $47,850.

"I find that the Miscellaneous Structures item was duplicated, and we should deduct from the gross total $1,843,068."

GEO. N. HILLMAN,
Reporter.

September 29, 1908.

Q. With regard to your contingencies, Mr. Berry, how do you estimate contingencies? Do you estimate that you have a ten per cent contingency upon each item, or do you estimate that your total contingencies will, in your judgment, equal ten per cent upon the total of all the items which you included?

A. I have always made it ten per cent of all the items I include. If you were to take separate items it might over-

run or underrun the ten per cent on one item.

Q. But in your contingencies you have simply aggregated the amount and taken the percentage of the aggregate amount?

A. Of those amounts that we think there is an element of uncertainty about.

Q. With regard to the classification of the branches which you did not see; I think you testified that you went over one branch in each state and that you acquired such information as you could with regard to the character of the country through which other branches ran; that you obtained, also, information from the engineer's office; you made your classification upon the basis of all that knowledge together and then compared the classification when made with the actual classification made by you on the nearest branch to that in a similar country; is that the fact?

A. Yes, sir; I went a little farther than that, too. I got from the comptroller a statement of the cost of those branches—

Q. And compared that with your result?

A. Yes, sir; but I did not use any of the comptroller's figures, not one.

Q. You have testified with regard to your assistants doing certain things under your instructions; how many of you were there on this trip?

A. One engineer only.

Q. Besides yourself?

A. Besides myself and a stenographer.

Q. And then how many have there been in St. Paul since you returned from the trip?

A. Three of my own men, and one of Mr. Darling's men.

Q. All working together?

A. At the same time, yes, sir.

Q. And in St. Paul?

A. Yes, sir.

Q. When these figures are finally submitted, are they the figures of your assistant, Mr. Beye, or your stenographer, or Mr. Darling's assistant, or are they your own?

Mr. DURMENT: We object to that as calling for a conclusion and as incompetent, because the witness has already testified that they were figures made up by his assistants from the records of the Northern Pacific office, using unit values which he gave them, and he took their figures for it reported to him.

The MASTER: He can explain fully.

A. The figures on the bridges taken from the records of the Northern Pacific were wholly made up by the bridge engineer of the Rock Island road, and I accepted them; the figures for all the improvements on station grounds were supervised wholly by Mr. Beye, my assistant, who was with me on the trip, and I accepted those values.

Q. Well, did you supervise Mr. Beye?

A. I gave him instruction as to prices to be used and to use the notes that he took on the line of the road on which I placed values to corroborate what he found in the chief engineer's office.

Q. How did he take his notes—at your dictation?

A. Entirely so.

Q. And were they his own notes?

A. No, sir, I told him what value to place there, if any.

Q. You and Mr. Beye worked together, as I understand it?

A. Yes, sir.

Q. You were together all the time of this trip?

A. Yes, sir, all the time.

Q. And he was merely assisting you?

A. Well, he was assisting me, but he is a very valuable man and has had large experience of those matters himself, being an accomplished engineer and having handled big work

of that character.

Q. I understand you to say that some of the track of these tunnels is duplicated; can you tell how much?

A. Why, no; it would probably be in the very short tunnels. I think in every case in and around St. Paul it is duplicated.

Q. And how much in all of mile track?

A. I can't tell you that exactly.

Q. A mile?

A. Well, I can't even say that. It is only in the shorter tunnels.

Q. Well, can you tell how many tunnels?

A. Well, I can't tell.

Q. I want to know what the outside limit of the duplication is.

A. Well, I am very certain in regard to two miles, I would limit it to three, anyhow, sure, and I am almost certain that there was one other tunnel west of Livingston through the mountains that was also cut out, and, at the most, there would be 2½ miles.

Q. And what total amount, in your judgment, is properly to be subtracted from your estimate on account of that duplication?

A. I don't say that any amount should be, now, until I look into the details of that particular mile; I wouldn't want to say that anything should be subtracted.

Q. Well, can you say, if anything should be subtracted, what it would be? Even if you were to take 2½ miles, it would be a subtraction of $125,000 from the whole estimate?

A. That I wish to be considered as no conclusive evidence whatever.

Mr. DURMENT: That is, you don't concede that anything should be deducted?

Witness: I can't tell you how much.

Q. How long would it take you to make a critical examination of the Northern Pacific System and all its branches, the foundation of which should be measurement, by yourself and assistants working with you, of all dimensions, proof of all quantities so far as it is possible for man to prove them, including number of ties, switches and plates, track-fastenings, fences, road-crossings, culverts, with their character and dimensions, station buildings and fixtures, water stations, shops, roundhouses and turn-tables, with their character and dimensions, so that you could give an accurate detailed estimate of the present cost of production of the System?

A. It would depend, of course, upon the amount of force you put on.

Q. I am talking with the force you could work with yourself and your assistants.

A. That I had direct charge of?

Q. Yes. Some years?

A. Why, I should say, at a wild guess, ten years.

Q. How much do you think it would cost if you would put on as much force as you could reasonably work and control?

A. Why, I should say somewhere between $600,000 and a million dollars.

Q. To make that estimate?

A. I think so. That is, with the great detail that you take.

Q. Yes, I am talking about making measurements—

A. Yes, sir.

Q. —cross-sections—.

A. Yes, sir, it would cost at least a million dollars. In fact, it would be impossible to get a good deal of the data, impossible.

Q. Do you know of any better method for making an estimate of the valuation of the Northern Pacific System in any reasonably short time and under any reasonable expense than

that which you have employed?

A. Only, if the time were extended, one might go over every mile of the road.

Q. Including the branches?

A. Every mile of the road, no matter whether it is a spur-track or a branch-line or anything that was away from the main line of the road, it would give you individual estimate of the value of that line, of that portion of it.

Q. Then you would not have had to take anything from the records of the Company and could have depended upon yourself?

A. No, sir, I would still have to go to the records of the Company and do practically what I have done now, but it would have given one his own ideas of the classification of the grading, somewhat greater knowledge of the character of the line and to check up the question of ballast, fences, grubbing and clearing, on each mile, the same as on each mile that we did go over.

Q. You did notice the ballast in each mile?

A. Yes, sir.

Q. You did notice the fencing on each mile?

A. Yes, sir; the fencing is not always continuous over each mile, sometimes we had to "give and take" a little on that.

Q. What is your judgment in regard to the reasonableness of the estimate you have made for fencing?

A. I think it is fair.

Q. And the ballasting?

A. I feel quite sure that the Northern Pacific spent more money for ballasting on its track than my estimate shows.

Mr. How: I offer in evidence Complainant's Ex. 24.

RE-CROSS EXAMINATION.

By Mr. DURMENT:

Q. Now, Mr. Berry, as I understand it, you didn't change the form of your plan Ex. 24, at all from the time you first made it. You did change some of the figures in it after you got additional information which showed that the figures you used were not the right ones?

A. The upper half of Ex. 24 was changed in only one item, and that was the ratio of sidings per mile of track. In the lower half we left out a number of items, such as ballast, and put it into the main estimate as a separate item. We also changed the rate per mile in a number of cases, and for the reason I have heretofore given, that I was somewhat curious to know whether the rate was anywhere near what we started out with; but the unit prices for everything were unchanged.

Q. The unit prices used in making up your tables in Ex. 24, were they the same unit prices you used in making up your estimate in the Spokane rate case?

A. Yes, sir.

Q. You said that, to make an examination of the bridge at Bismarck, which would have enabled you to make the valuation which is shown in that Ex. 25 for it, from your personal investigation and knowledge of it, would have required about thirty days?

A. Well, I said so.

Q. Roughly speaking?

A. Yes. I would be very glad if the lawyers would confine me to facts and not suppositions. I would be very glad if you would do it, because I am generally accustomed to dealing with that kind of work, and an answer of that kind depends upon how many men I could work at it successfully and supervise, and there is an immense mass of detail at the Bismarck bridge.

Q. The trouble about that is that the gentleman, Mr. How, to whom you spoke in your examination, (your own counsel,) has set the pace; he has asked you, and now I want to know something about it, upon the same theory.

A. Well now, you say in the Bismarck bridge,—You pick out a hard problem.

Q. I didn't pick it out, your own counsel picked it out.

A. I mean the lawyers did. I would have to go to the records for an unusual amount of information to get that, such as work done by work trains, the amount of brush, stone, piles, timber, and so on, used in the river protection above the bridge, on both sides, as well as a mass of information about the construction of those piers. This is only relative: I understand that in one of those piers they had a great deal of trouble with it, and it cost a large sum of money. The upper work is comparatively easy.

Q. Well, there are a number of other bridges in that list which you have given the value of in Ex. 25 which would take as much time for an investigation to enable you to give the valuation as given in the exhibit, as to your personal knowledge of it, as it would take in the Bismarck bridge, aren't there?

A. Well, I don't recall a single bridge that would require as much investigation. If one were allowed to take the plan of the Northern Pacific Railroad and inquire all you could in regard to the conditions of these other bridges, I think it would be a much simpler problem any one bridge, than the Bismarck bridge. I want to say to you that the Missouri river is an unusual stream to handle, and that is why it would take more time than most other streams.

Q. But it doesn't take any less time when I ask you the question than when Mr. How asks you, does it?

A. Not a bit.

Q. And at that same rate, if you made a personal inspec-

tion of that list of bridges which you have given specific values for in Ex. 25, say you yourself made this personal inspection of the work to make up those values, it would take you at least six months, wouldn't it, for the bridges?

A. It couldn't be done in anywhere near that time.

Q. It would take more than that?

A. Oh, much more. You see there are about 250, and there are only 180 days in six months.

Q. So it would take several times six months?

A. It might take two or three years.

Q. And yet, so far as your knowledge from an inspection of this line is concerned, it is included, outside of the terminals which you have testified to, in an inspection of twenty-one days?

A. No, I didn't say that. The information in regard to those bridges—

Q. Oh, now, let us talk about the same thing.

A. Well?

Q. I say, so far as your knowledge from the inspection you have made of the road itself—

A. Yes.

Q. —is concerned, all you have got you obtained in about 21 days?

A. That is right.

Q. And for the terminals which you have given us here, I don't remember exactly, but I should say about four days?

A. Of those that I saw that I personally examined. That is, the big ones.

Q. Yes, the big ones that you personally saw.

A. Then there were a number of smaller ones, that you didn't ask me how long it took, that I did see.

Q. That is true, but I say of those big terminals where you say you spent a day or a half a day at them and which you specified particularly—

A. Yes.

Q. —not to exceed 4½ days, and I think it was less than that all told.

A. That is right.

Q. Now, with reference to the twenty millions of dollars, the value of the bridges, as I remember it, your testimony was, at first, when Mr. How first examined you about it, when I cross-examined you about it, you said that you got that value from the superintendent of bridges of the Northern Pacific, that total of twenty millions of dollars; that you then made your values on this eleven millions something of the road shown in this Ex. 25 and took the values you made on those from the values of over twenty millions of dollars which the superintendent of bridges of the road before gave you and assumed that that balance of eight millions and some odd thousand dollars was right?

A. No, I don't think I testified that way.

Q. I so understood it.

A. No, in the Spokane rate case I got a list of all the bridges, culverts, etc., and all the data I could get in connection with the same as to quantities, and I used the unit prices that I had been accustomed to, and that produced twenty million dollars.

Q. Then that twenty million dollars was your figures, made up by you, using the unit values you thought proper, upon the basis of the information which you got from the Northern Pacific road—

A. Yes, sir.

Q. —as to quantity?

A. Yes, sir.

Q. Now, you were asked, also, in regard to this fencing and snow-fences and the like. My recollection is that you said, on cross-examination, that you took the information which you got from the officials or the records of the North-

ern Pacific Road, as to the amount of snow-fences or amount of fencing, the number of miles of fence and the price of it, and that you did not yourself make any investigation or estimate of the exact number of miles of fence.

A. We took the records of the Northern Pacific Railroad and its valuation in the Spokane rate case only in right-of-way fence. When we made this trip over the road, we tried to keep a check of all the line that was fenced, to balance it against that record that we had in the Spokane rate case.

Q. And, so far as you could keep the record, it balanced?

A. Very nearly.

Q. But still, there was only a little over half of the lines that you saw on this inspection?

A. That is true.

Q. Do you mean that of the line you saw on this inspection it figured up about half the fencing shown on the record?

A. No, the lines we did not go over, we asked the local officials about the fencing.

Q. And checked up in that way?

A. Yes, sir.

Mr. HOW: I will ask the witness if he will produce Mr. Beye, and his bridge engineer, for cross-examination, if counsel want them, with regard to the assistance that he got from them in compiling these statements. He declares that he will. There is a chance for you, gentlemen.

Mr. O'BRIEN: You are the fellow that has got to make these tables and exhibits good. If you have done it, all right; if you haven't, I don't know that we are obliged to produce evidence for you.

Mr. HOW: We make that offer—to produce anybody who has assisted in making these estimates and tables conclusive, for cross-examination if they ask for it.

Mr. O'BRIEN: When we want them we will call for them.

Adjourned until the morning of Friday, September 18, 1908.

FEDERAL BUILDING, St. Paul, Minn., Friday, September 18, 1908, hearing resumed at 10 o'clock A. M.

H. A. GRAY,

recalled on behalf of Complainant, testified:

Examined by Mr. How:

Q. Mr. Gray, have you made a closer examination of old records of the Company since your testimony?

A. I have.

Q. With what particular end in view?

A. With the end of straightening out the question as to the issues of stock of the original Northern Pacific Railroad Company.

Q. And the bonds?

A. And the bonds, and cash proceeds, etc.

Q. Have you prepared a succinct financial history of the Northern Pacific Railroad and Railway Companies?

A. Yes.

Q. Does that contain all the information that you now know of as available upon the subject, especially with regard to the early history?

A. I believe so.

Q. You know of no fact with regard to the early history, especially, that is omitted from the history as you now have it in mind?

A. No important fact or fact having a bearing upon the financial history.

Q. Will you now give that history? And I think there is no objection to your reading from this prepared typewritten statement.

It was agreed that cross-examination, if any, upon this statement should be taken up by the State's attorneys at some later time, and the statement referred to was as follows:

FINANCIAL HISTORY OF THE NORTHERN PACIFIC RAILROAD COMPANY.

By an act of Congress approved July 2, 1864, certain persons therein named and their successors were duly created a body corporate under the name "Northern Pacific Railroad Company", with power to "construct, maintain and enjoy" a railroad and telegraph line from a point on Lake Superior in Minnesota or Wisconsin westerly by a route to be determined by the Company, to some point on Puget sound, with a branch via the valley of the Columbia river to Portland, Oregon. The persons named in the act were appointed commissioners whose duty it was to open books for stock subscriptions. Unless $2,000,000 of stock should be subscribed for and ten per cent of the par value paid in within two years after the approval of the act, it was provided that the act should become null and void. The capital stock of the Company was fixed at $100,000,000, and it was provided that no mortgage should be made upon the property.

By the same act a right of way four hundred feet in width through the public lands was granted to the Company, and "for the purpose of aiding in the construction of said railroad and telegraph line to the Pacific coast and to secure the safe and speedy transportation of the mails, troops, munitions of war and public stores over the route of said line of railway" every alternate section of public land not mineral, to the amount of twenty sections per mile on each side of the railway line, through the territories, and to the amount of ten sections per mile on each side, through the states, was granted to the Company, patents therefor to be issued for each twenty-five miles when such twenty-five miles of road should be completed. Each grant in the act was conditioned upon the beginning of work upon the construction of the road within two years after the approval of the act, the completion of not less than fifty miles per year after the second year and the construction and

equipment of the whole road by July 4, 1876. July 1, 1868, the act was amended so as to provide for an extension of time for the beginning of the work, to July 2, 1870, and for completing the work by July 4, 1877.

The act provided that the railroad should be "subject to the use of the United States for postal, military, naval and all other government service" and should be subject to such regulations as Congress should impose restricting rates for government transportation.

Pursuant to the provisions of the act the commissioners opened books for subscriptions to the capital stock, and $2,007,500 in stock was subscribed for and $200,750 was paid in on account of the subscription. The subscribers to the stock met and elected a board of directors, and the directors met, elected officers and formally accepted the act on the 15th of December, 1864.

The enterprise languished, and the subscribers to the 20,075 shares of stock failed to pay further calls upon their subscriptions. Subsequently the subscriptions were canceled, and all rights of the subscribers were declared forfeited. In 1867 the "Original Interests Agreement" was entered into. The parties to it were prominent railroad and express company men to whom the original promoters had assigned all their rights in the enterprise in order that the enterprise might go forward. By its terms the enterprise was divided into twelve shares and the subscribers to these shares assumed liability for and agreed to repay $102,000 already expended by former promoters and agreed to contribute ratably such sums as should be necessary for obtaining further legislation in aid of construction of the road. Much effort and about $250,000 was spent by the subscribers to this agreement but no further congressional aid or state aid could be obtained. By resolution approved May 31, 1870, Congress authorized the Company to issue its bonds and to secure them by mortgage upon its real and personal prop-

erty, including its franchises. Under date of May 20, 1869, a contract, amended January 1, 1870, was entered into between the Company and Jay Cooke & Company, of Philadelphia. By the terms of this contract, as amended, bonds of the Company to the amount of $100,000,000, bearing interest at 7.3 per cent per annum, both principal and interest being payable in gold, were to be issued and secured by mortgage; Cooke & Company were appointed sole fiscal agents of the Company for the sale of these bonds; they agreed to use their best efforts to dispose of them, to advance $500,000 to the Company and to raise $5,000,000 for the Company by the sale of bonds within thirty days; the Original Interests Agreement was modified so that the twelve shares therein provided for were increased to twenty-four, and twelve thereof assigned to Cooke & Company; the stock of $100,000,000 was to be appropriated as follows: $80,001,000 thereof was to be subscribed for by the representatives of the twenty-four shares in equal portions and was to be issued in full paid-up stock to each of said twenty-four shares as follows: $93,400 thereof immediately and $40,500 as often as twenty-five miles of said railroad should be completed; the balance of such capital stock, to-wit, $19,999,000, was to be delivered to Cooke & Company in full paid-up stock as follows: that is to say, as often as Cooke & Company should sell and place to the credit of the Company the proceeds of $1,000 of the bonds of the Company, they should be entitled to receive $200 of such stock until the whole $19,999,000 of such stock should be issued; the bonds were to be accounted for by Cooke & Company to the Company at 88 cents on the dollar; bonds were to be issued to the holders of the original interests for the payment of amounts expended by them and for compensation for personal services, and, further, to retire the outstanding stock of the Company ($600,000 of which bearing 6 per cent interest had been issued) at a rate not exceeding 50 per cent of par on such stock.

On the 16th of May, 1873, about $21,000,000 of 7.3 bonds had been issued and on that date a supplementary agreement was entered into between the Company and Jay Cooke & Company, by which it was provided that the issue of 7.3 bonds should be limited to 30,000,000 of dollars, and that any further bonds issued should bear interest at six per cent. It was provided with regard to the remaining 9,000,000 of 7.3 bonds to be issued that they might be sold for a net credit to the Company of 83 cents and accrued interest and that the commission to be allowed the fiscal agents should be increased to $400 par value full paid stock for each $1,000 of bonds sold by them. The provision that all bonds issued in excess of $30,000,000 should be six per cent bonds was never complied with.

Jay Cooke & Co. failed in September, 1873. Prior to May 16, 1873, they had disposed of and accounted for bonds to the par value of $20,994,000 and subsequently to that date to the par value of $7,181,300. Prior to May 16, 1873, the Company had itself disposed of bonds to the par value of $1,566,800, (all or nearly all of which were issued to satisfy claims against it) and subsequently to that date to the par value of $2,013,600, making a total of $31,755,700 par value of bonds issued. With the proceeds of these bonds and of land sales the Company had constructed 530 miles of road, a part of which was on the eastern end of its located route, and a part on the western end, and had acquired the control of 25 miles of the road of the Lake Superior & Mississippi River R. R. Co. Disposition of the bonds by Cooke & Co. or the Company required giving of stock as a bonus—sometimes, perhaps, even four shares of stock being offered with each $1,000 bond. The first prospectus for the sale of bonds, issued in 1871, offered the bonds at 88 cents on the dollar, and offered fifteen per cent in common stock at par with each bond. This stock came from that agreed to be paid to Cooke & Co. as commission and was not to be issued in addition thereto; and the prospectus was ratified by the Company

as applicable to the issue of 10,000,000 of bonds, and $7,500,000 of stock out of the $19,999,000 reserved to pay Cooke & Co.'s commission was reserved to carry out the offer in the prospectus. Bonds were sold outright by the Company for as low as twenty-five cents on the dollar. However, strenuous efforts made to that end failed to secure from Congress further extension of time for the completion of the road by the Company, and it was necessary to raise money on any possible terms so that the work might proceed.

On April 16, 1875, the Circuit Court of the United States for the Southern District of New York, in a suit brought by the trustees under the 7 3/10 mortgage, appointed a receiver of all the property of the Company. May 12, 1875, a decree was entered in this suit ordering a sale of the property of the Company for the benefit of bondholders. Such sale was had on the 12th of August, 1875, and the property was purchased by a committee for the benefit of all interested parties who should assent to the plan for reorganization.

The plan provided for a division of the $100,000,000 of stock authorized by the charter into $51,000,000 of preferred and $49,000,000 of common. The preferred was to be entitled to dividends not exceeding 8 per cent p[illegible]nnum before any should be paid on the common, and was to be convertible at par into lands east of the Missouri river until default in the mortgage provided for in the plan. It was to be issued to retire the outstanding 7 3/10 bonds and interest up to July 1, 1878, at the rate of 8 per cent per annum, and to discharge other obligations of the Company. The common was not to be entitled to vote until July 1, 1878. It was to be issued "to holders of, or to those now entitled to certificates, share for share; and the residue ratably to those originally entitled thereto, or their assigns." Bonds not to exceed $25,000 per mile were to be issued to provide means to complete and equip the road, and were to be secured by a first mortgage on all the property of

the Company, subject, until default, to the rights of holders of preferred stock in the lands east of the Missouri river.

Pursuant to the plan there was issued $42,715,285.09 of preferred stock to take up the outstanding 7 3/10 bonds and other claims. The balance of the preferred stock was issued from time to time under authority of the board of directors in aid of construction, and for other purposes, and stock received in exchange for land from time to time as provided by the plan was in some cases re-issued for like purposes.

The common stock was issued pursuant to the provisions of the plan and apparently as follows:

Under the financial agreement with Jay Cooke & Co. there became due to Cooke & Co. directly upon their disposition of bonds prior to May 16, 1873, (two shares for each $1,000 bond) $4,198,800 of common stock, and upon their disposition of bonds thereafter (four shares for each $1,000 bond) $2,872,520 thereof. Apparently most of this stock had gone to purchasers of bonds as a so-called bonus. Under that agreement also and as the owner of twelve of the twenty-four shares under the Original Interests Agreement, Cooke & Co. became entitled forthwith upon their entering into the agreement to $1,120,800 of stock ($93,400 per share), and, because there had been completed 21 sections of 25 miles each of railroad, had since become entitled to $10,206,000 of stock (12 shares, 21 sections at $40,500 per section). The owners of the other shares under the Original Interests Agreement had also become in the aggregate entitled to $1,120,800 of stock forthwith on the delivery of the agreement, and $10,206,000 thereafter on construction of the 530 miles of road. The total to which Cooke & Co. and their assigns became entitled by virtue of their contract with the Company was, therefore, $18,398,120, and the total to which the holders of the other shares under the Original Interests Agreement became entitled was $11,326,800—an entire total of $29,724,920. It appears that $29,952,600 of new common

stock was devoted to the purpose of taking up old stock in the corporation outstanding at the date of the receivership of 1875, showing an amount of $227,600 of old stock, the issue of which cannot now be accounted for. It is probable that much, if not all, of this was issued by the Company to induce the purchase of bonds directly from it. The residue of the common stock amounting to $19,047,400 remained unissued until 1881, when, there having been sufficient road constructed to justify its issue under the agreement with Cooke & Co., it was issued ratably to the holders of the 24 shares. Jay Cooke & Co. and their assigns, by virtue of the agreement with the Company, received one-half of this—making a grand total to which they and purchasers of bonds as their assigns became entitled under the financial agreement and which they received, of $27,921,820.

The then prospects of the common stock as an income producer may be learned from the following statement of the *gross earnings* of the Company immediately after the reorganization:

GROSS EARNINGS FROM OCTOBER, 1875, TO JUNE 30, 1880.

Eleven months ending August 31, 1876	$739,745.51
Year ending August 31, 1877	965,823.37
Year ending August 31, 1878	1,193,381.90
Ten months ending June 30, 1879	1,167,261.82
Year ending June 30, 1880	2,230,181.81

It would require $4,080,000 to pay the dividend on the preferred stock payable before the common should be entitled to any dividend. Further, as is hereinafter stated, the Missouri division mortgage, dated May 1, 1879, securing $2,500,000 bonds, with interest at 6 per cent, and the Pend d'Oreille division mortgage dated September 1, 1879, securing $4,500,000 bonds with interest at 6 per cent called for the payment of $420,000 in interest before any dividend might be declared in any year on the preferred stock.

Moreover, the plan for reorganization provided for a general first mortgage on all the property of the Company to secure

bonds to an amount not exceeding $25,000 per mile of completed road, and for a sinking fund to redeem bonds issued under it. The plan also provided that net earnings applicable to dividends on preferred stock should be construed to mean such surplus earnings as should remain after paying operating expenses, taxes, &c., and "the interest and sinking fund on the first mortgage bonds", and the expense of "providing such additional equipment as said Company shall deem necessary for the business of said railroad."

December 19, 1878, the board of directors authorized the Missouri division mortgage. The resolution provided for the issue of 6 per cent forty-year bonds, not exceeding $2,500,000 in amount, to provide means for completing and equipping that portion of the Company's main line from the Missouri river to the Yellowstone river, and for procuring transfer boats to cross the Missouri river, and for securing these bonds by a mortgage on this portion of the road and the granted lands applicable thereto. It provided for the issue of $2,050,000 of preferred stock to be offered for subscription at par. Each subscriber who should have paid in full the amount of his subscription should receive bonds equal to the amount of his subscription. The mortgage was made under date May 1, 1879, and the full amount of authorized bonds was issued. $2,500,000 of stock appears to have been issued under this plan and forms a part of the balance of $51,000,000 of authorized preferred stock after the use of so much as was necessary to take up the 7 3/10 bonds and other obligations of the Company on reorganization in 1875.

May 23, 1879, the board of directors authorized the Pend d'Oreille division mortgage. The resolution provided for the issue of 6 per cent forty-year bonds to an amount not exceeding $20,000 per mile to aid in constructing and equipping the 209 miles, more or less, of the Company's road between the mouth of the Snake river and lake Pend d'Oreille, and for the

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securing of these bonds by a mortgage on this portion of the road and the granted lands applicable thereto. It provided for the issue of 14,000 shares of preferred stock and for the sale of seven shares of stock and $1,000 of bonds for $1,000. The mortgage was made under date September 1, 1879, and there was issued under it the full amount of $4,500,000 of bonds. ($1,665,000 of stock appears to have been issued under this plan and forms a part of the balance of $51,000,000 of authorized preferred stock after the issue of so much as was necessary to take up the 7 3/10 bonds and other obligations of the Company on reorganization in 1875).

The general first mortgage contemplated by the plan of reorganization in 1875 bore date January 1, 1881, as authorized by the board of directors December 16, 1880. It recited the determination of the Company to issue its forty-year 6 per cent bonds to an amount not exceeding $25,000 per mile of its entire line of railroad for the purpose of completing the construction and equipment thereof and of retiring the bonds issued under the Missouri division and Pend d'Oreille division mortgages. It secured these bonds by a lien on all its property. It provided for a sinking fund of one per cent of all outstanding bonds and accumulated interest. Prior to the making of this mortgage the Company had entered into an agreement dated November 30, 1880, with Drexel, Morgan & Co., Winslow, Lanier & Co., and August Belmont & Co. for the sale to them of $10,000,000 of these bonds at 90 and granting of an option to them to purchase $30,000,000 more at specified times at 92½ and accumulated interest. With each purchase of bonds the purchasers were to get five per cent of the amount of the bonds sold in preferred stock. ($1,783,635.10 of stock appears to have been issued under this contract and forms a part of the balance of the $51,000,000 of authorized preferred stock after the use of so much as was necessary to take up the 7 3/10 bonds and other obligations of the Company on reorganization in 1875.)

With the consent of the preferred stockholders given at a meeting held November 20, 1883, as provided by the plan of reorganization and under date November 20, 1883, the Company made its general second mortgage to secure an issue of not exceeding $20,000,000 forty-year 6 per cent bonds. The mortgage recited the inadequacy of the provision in the plan of reorganization of $25,000 per mile to meet the expense of completing and equipping certain parts of the line already built, and the borrowing of money therefor, and the determination of the Company to issue its bonds under this mortgage to repay such borrowed money and to provide funds for completing parts of the road then under construction, and to purchase additional equipment. This mortgage also provided for a sinking fund equal to one per cent of the aggregate of the principal of all bonds outstanding under it, with accumulated interest.

With like consent of the preferred stockholders given at a meeting held November 3, 1887, and under date December 1, 1887, the Company made its general third mortgage to secure an issue of not exceeding $12,000,000 fifty-year 6 per cent bonds. These bonds were provided to be issued for the following purposes:

1. To provide for the completion of the railroad and equipment therefor as needed.

2. To repay borrowed money for construction and equipment.

3. Prior to June 30, 1882, there had been expended for construction $4,640,821.20 taken from earnings applicable to dividends on the preferred stock. No dividend on stock of the Company had ever been declared. Therefore on September 14, 1882, the board of directors declared a dividend on the preferred stock of 11.1 per cent for which should be issued certificates of indebtedness of the Company dated January 1, 1883, payable five years from date with interest at 6 per cent payable annually. These certificates to the amount of $4,640,821.20

were then outstanding and the Company had offered to the holders the privilege of extending them to January 1, 1907, on 6 per cent interest payable semi-annually, and had agreed, in case it should make a mortgage on its property, to give the holders of such certificates the privilege of converting them into bonds secured by this mortgage. Provision for such conversion was made in this mortgage.

August 18, 1881, the board of directors adopted a resolution reciting that there are large extents of territory north and south of the Company's main line capable of furnishing business for the main line if lateral branches be constructed; that by its plan of reorganization the Company is prohibited from using its means in the construction of such branches; that its power under its charter to construct such branches is questioned; that such construction is imperatively demanded to develop the country and secure to the Company the traffic of such country so developed; that other corporations propose to construct such lateral roads. It was therefore resolved that the Company should from time to time whenever any such lateral road should have been located and constructed as the Company should approve, accept a lease of the road for a term of not less than thirty-three years upon the following terms:

1. The Company should pay:
   (a) Such amount semi-annually as should be equal to the semi-annual interest not exceeding six per cent per annum on the bonds (not exceeding $20,000 per mile), issued for the construction of the road;
   (b) Such sum annually or semi-annually as should furnish an adequate sinking fund for the extinguishment of such bonds;
   (c) Such sum not exceeding $2,000 annually as should be required to maintain the legal organization of the lessor;
   (d) All taxes on the leased property.

2. All capital stock of the lessor should be held by a trustee until all bonds should be extinguished and then to be delivered to the Company.

May 9, 1882, the executive committee adopted a resolution containing similar recitals of fact to those contained in its resolution of August 18, 1881, as above recited, and further, that it is indispensable for the interests of the Company that lateral roads shall be built by companies whose alliance with this Company shall be secured. It was therefore resolved that whenever any such road should be located and constructed satisfactorily to the Company it would enter into a contract for a period of ninety-nine years with the owner under which the owner should transact all its business other than local which it legally might with the Company, and the Company should guarantee net earnings to the owner of not less than $1,400 per mile after the first two years, provided all the capital stock of the owner should be transferred to a trustee appointed by the Company which should have full right to vote and receive dividends on it during the contract, and that at the termination of the contract it should become the absolute property of the Company.

With the consent of the preferred stockholders of the Company given at a meeting held October 17, 1889, the Company made its consolidated mortgage on all its property (excepting its granted lands east of the Missouri river) dated December 2, 1889, to secure an issue of $160,000,000 bonds, to be issued from time to time as determined by the board of directors, to fall due December 1, 1989, and to bear interest at not exceeding 5 per cent per annum. The mortgage recites twenty-one corporations which had theretofore constructed railroads connecting with and tributary to the Company's lines and the operation by the Company of all these railroads under contracts by which the Company became liable for interest and sinking fund on bonds issued by the respective owners, and had become or

would become, when the bonds were paid the absolute owner of all the stock of the respective corporations in all cases but two, and in these cases had become the owner of a majority of the stock.

The mortgage provided that the bonds to be issued under it should be reserved for the following purposes:—

1. $75,000,000 to retire or to refund at a lower rate of interest the following then outstanding bonds:—

General first mortgage,.....	$45,520,000
General second mortgage,...	19,910,000
General third mortgage,....	12,000,000
	$77,430,000

2. $26,000,000 to be issued when the Company shall have acquired the respective lines of railroad hereinabove referred to, free from mortgage, or shall have acquired the mortgage bonds issued by the companies owning them—the bonds under this mortgage to be issued from time to time as such bonds of such various companies are redeemed by operation of sinking funds or paid by other means or purchased by the Northern Pacific Company and assigned to the trustee under this mortgage.

3. $20,000,000 to be issued from time to time for construction or acquisition of such additional roads as the Company may advantageously and lawfully construct or acquire.

4. $20,000,000 to be issued from time to time for enlargement of terminals, betterments, etc., not properly chargeable to operating expenses.

5. $10,000,000 for premiums on bonds exchanged or refunded, but only to be used when a saving of interest can be effected thereby.

6. $9,000,000 for any lawful purpose.

In 1893, the Railroad Company having again become hopelessly insolvent, P. B. Winston, and other stockholders, filed

with the Circuit Court of the United States for the Eastern District of Wisconsin on the 15th day of August, 1893, a creditor's bill, praying that the court fully administer the trust fund, consisting of the entire railroad system, and the other assets of the Company, and ascertain and enforce the respective claims of its bondholders and other creditors. Receivers were duly appointed in this suit who took possession of all the property of the Company. Actions of like nature were at about the same time brought in the United States Circuit courts in other jurisdictions in which the Company had property.

In October, 1893, the interest due on the bonds secured by the general second mortgage and the consolidated mortgage had become in default, and on the 18th of that month the Farmers' Loan & Trust Company as trustee under each of those mortgages filed in the United States Circuit Court for the Eastern District of Wisconsin its bill praying for their foreclosure. By an order entered on the same day the receivership of the receivers appointed under the creditors' bill brought by Winston and others was extended to the suit for foreclosure and the two causes were consolidated under the title of the foreclosure suit, and proceeded thereafter as one consolidated suit under that title. Thereafter similar bills for the foreclosure of these mortgages were filed by the complainant in the several other jurisdictions above referred to, and like orders were made and proceedings taken in the courts of those jurisdictions as had been taken in the court of original jurisdiction.

The Company was operated by receivers until the year 1896. The operation by the receivers since 1893 made it clear that in order to reorganize the property it would be wholly necessary largely to reduce the fixed charges of the Company and to provide a large sum in cash to be used for reorganization purposes, and considerable from time to time to be used by the Company for maintenance and improvement of its existing system. A committee of the holders of the general second

mortgage bonds, the general third mortgage bonds and the consolidated mortgage bonds of the Company had been formed in February, 1894, not long after the appointment of the receivers, and during the succeeding years this committee took active steps for the protection of the interests of the bondholders of the Railroad Company.

In January, 1896, this committee requested J. P. Morgan & Company, of New York, to cooperate in devising a practical plan of reorganization, and when such plan should be formulated, to raise the money necessary to carry it into effect. Accordingly, in conjunction with the Deutsche Bank, of Berlin, representing important foreign interests, and Mr. Edward D. Adams, the chairman of the bondholders' committee, and after consultation with other parties representing bondholders' interests, a plan of reorganization was formulated, and J. P. Morgan & Company were constituted the reorganization managers. An essential feature of this plan as proposed was the formation of a syndicate to furnish the cash required to carry it out, and in order that the fixed charges of the new Company might be reduced below the probable income of the property, it was essential that this cash should be provided largely by the sale of stock instead of by the sale of interest-bearing securities.

Prior to the publication of the plan, a syndicate agreement dated March 16, 1896, was made between the reorganization managers and the Deutsche Bank, on the one hand, and the members of the syndicate on the other, by which the syndicate subscribers (of whom few had any interest whatever in the stock of the old Company) agreed to furnish the amount of money required for the purpose of carrying out the plan of reorganization to the sum of $45,000,000, and agreed to pay absolutely $19,873,830 in cash plus any interest accrued on the bonds when delivered, for the following named securities of the new Company, which it was proposed should take over the properties, to-wit:

New 4 per cent prior lien mortgage bonds,...$7,775,000
New 3 per cent general mortgage bonds,.....1,172,880
New preferred stock,.....18,767,825
New common stock,.....77,500,000

and agreed to pay further, if requested by the reorganization managers $8,875,000 plus any interest accrued on the bonds when delivered, for the following securities, to-wit:

New 4 per cent prior lien mortgage bonds, $3,554,960
New 3 per cent general mortgage bonds, 9,718,120

and to take any part or parts of either of such lots of bonds at a ratable price therefor to be agreed upon between the syndicate managers and the reorganization managers.

The syndicate agreed further, if at any time the reorganization managers should desire, to advance moneys upon the security of certificates approved by the syndicate managers entitling their holders to new securities when issued, or upon other security, or to purchase lands or land notes, providing that the total obligations of the syndicate should not exceed the sum of $45,000,000 in cash.

On the 1st of January, 1896, the funded debt of the Railroad Company amounted to $138,127,000, constituted as follows:

Missouri division bonds,.....$1,815,500
Pend d'Oreille division bonds, ...357,000
General first mortgage bonds,.....41,879,000
General second mortgage bonds,....19,216,000
General third mortgage bonds,.....11,426,000
Consolidated mortgage bonds,.....45,520,000
Dividend certificates (issued under date Jan. 1, 1883),.....519,500
Collateral trust notes,.....9,494,000
Northwest Equipment Co,.....3,000,000
Receivers' certificates,.....4,900,000
$138,127,000

And in addition there were outstanding in the

hands of the public,.....30,670,000

of bonds, principal, interest and sinking fund of which had been guaranteed by the Company, making a grand total of.....$168,797,000

the fixed charges on which amounted to $10,905,690.

The adjusted net income from all scources applicable to these fixed charges had shown in the year ending June 30, 1894, a deficit of.....$6,145,269.69

and in the year ending June 30, 1895, a deficit of...5,128,785.21

A total of.....$11,274,054.90

An average per year of.....$5,637,027.45

The announcement of the bondholders' committee and of the stockholders' protective committee, which had been formed and had been working in conjunction with it, to the holders of the bonds and stocks issued or guaranteed by the Company, recited as a palpably necessary element of reorganization: "The reduction of fixed annual charges to less than the minimum earnings under probable conditions." The plan of reorganization provided for the sale of all the properties of the Company to a new company, and for the authorization by the new company of the following securities:

1. $130,000,000 prior lien 100 year 4 per cent bonds;
2. $190,000,000 general lien 150 year 3 per cent bonds;
3. $75,000,000 preferred 4 per cent noncumulative stock;
4. $80,000,000 common stock.

The 4 per cent bonds were to be appropiated approximately as follows:

To retire an equal amount of general first mortgage bonds,.....$41,879,000

To provide for the conversion and, so far as necessary for the sinking fund of the general first Mortgage bonds (any amount not so

used to be added to the reserve for new construction, etc.,) 14,657,650

For the payment of receivers' certificates and equipment trust and the conversion of the collateral trust notes and general second mortgage bonds, ... 40,040,350

Total issued under the plan, ... $96,577,000

Reserved to provide at their maturity for an equal amount of bonds of the bonds of the St. Paul & Northern Pacific Railroad Company ... 8,423,000

Estimated amount to be reserved for new construction, betterments, equipment, etc., under carefully guarded restrictions in the mortgage, and to the extent of not exceeding $1,500,000 per annum, ... 25,000,000

Total authorized issue, ... $130,000,000

The 3 per cent bonds were to be appropriated approximately as follows:

For the conversion of the general third mortgage bonds, dividend certificates, and the consolidated mortgage and branch line bonds under the plan, ... $56,000,000

Estimated amount to be reserved under carefully guarded restrictions in the mortgage for new construction, betterments, equipment, etc., ... 4,000,000

Total issue in excess of prior lien bonds, ... $60,000,000

Reserved to provide for the prior lien bonds at their maturity in 100 years, ... $130,000,000

Maximum amount of both mortgages, ... $190,000,000

The preferred stock was to be appropriated approximately as follows:

For conversion and adjustment of various main line and branch line mortgage bonds and the defaulted interest thereon, and other purposes, as provided in the plan,	$72,500,000
Estimated amount which may be used for reorganization purposes or may be available as a Treasury asset of the new Company,	2,500,000
	$75,000,000

The Common stock was to be appropriated approximately as follows:

For purposes of reorganization as provided in plan,	$77,500,000
Estimated amount which may be used for reorganization purposes or may be available as a treasury asset of the new Company,	2,500,000
	$80,000,000

The preferred stock might by its terms be retired by the new Company at par upon any first day of January during the following twenty years.

The plan was in general fully carried out. The outstanding stock of the Superior and St. Croix Railroad Company, a corporation under a special law of the state of Wisconsin, was acquired. An amendment of the act incorporating the Company, and necessary to meet the exigencies of the situation, was obtained from the legislature of Wisconsin, and the name of the corporation was changed to Northern Pacific Railway Company.

The report of the reorganization managers made to the Company under date April 14, 1897, showed that there were issued by the Company and disposed of by the reorganization

managers for carrying out the reorganization:

Of prior lien 4 per cent bonds,.....$73,806,000
Of general lien 3 per cent bonds,.....52,620,000
Of preferred stock,.....70,913,700
Of common stock,.....77,500,000

The results of the reorganization as it affected fixed charges were a reduction of such fixed charges from $10,905,690 to $6,052,660.

Under the terms of the agreement between the syndicate and the reorganization committee, the holders of the preferred stock of the Northern Pacific Railroad Company depositing certificates therefor with the reorganization managers, and paying $10 per share, were entitled to receive one-half a share of preferred stock, and one-half a share of common stock, in the Northern Pacific Railway Company for each share so deposited, and holders of common stock of such Northern Pacific Railroad Company depositing certificates therefor with the reorganization managers and paying $15 per share, were entitled to receive a share of the common stock of the Northern Pacific Railway Company for each share so deposited, and the reorganization managers were authorized to receive and accept such payments for and on account of the syndicate, and to deliver on account of the syndicate shares of preferred stock or common stock, as the same might be, out of the shares purchased by the syndicate from the reorganization managers.

After this contract was carried out the syndicate had received net in prior lien bonds.....$7,775,000
In general lien bonds ($3,031,120 of which had been taken from the reorganization managers at a ratable price fixed therefor).....4,204,000
In preferred stock,.....1,148,700
In common stock,.....10,880,900

and were entitled to credit for $10 per share on $35,238,300 of the old preferred stock, and $15 per share on $49,000,000 of

the old common stock.

The market value of the securities in the possession of the syndicate after the performance of the contract as shown by the opening price thereof in the general market was as follows:

$7,775,000 prior lien bonds at 85⅞	$6,676,781.25
4,204,000 general lien bonds at 51	2,144,040.00
1,148,700 preferred stock at 36	413,532.00
10,880,900 common stock at 12¼	1,332,910.25
At $10 per share on $35,238,300 old preferred stock, as above,	3,523,830.00
At $15 per share on $49,000,000 old common stock, as above,	7,350,000.00
In addition thereto the syndicate received by agreement a cash commission of	3,000,000.00
Making the total value of what the syndicate received out of the transaction	$24,441,093.50
Against this amount the syndicate paid in cash,	21,692,430.00
Leaving a net profit to the syndicate based upon the opening price of the securities in the market of	$2,748,663.50
Including the $3,000,000 agreed upon cash commission or, disregarding that, a loss of	251,336.50

After the books of the reorganized company (Northern Pacific Railway Company) were opened the following securities were shown as liabilities of the Company:

Preferred stock,	$75,000,000
Common stock,	80,000,000
Prior lien bonds,	74,812,500
General lien bonds,	56,000,000
Missouri division bonds (N. P. Ry. Co. assumed)	1,755,000
General first mtg. bonds (N. P. Ry. Co. assumed)	15,392,000
St. Paul & N. P. Ry. genl. mtg. bonds (assumed)	8,003,000

Western R. R. of Minn. 1st mtg. bonds (assumed)....420,000
Prior lien bonds reserved as provided in the mortgage for issue and conversion of general first mtg. bonds N. P. R. R., ...4,617,500

Making a total liability of.....$316,000,000

Of the securities above listed there were in the Company's treasury $4,086,300 Northern Pacific Railway preferred stock, valued on the books at 30 per cent and sold subsequently for 67¼ per cent. (The first quotation for this stock after the reorganization was 36 per cent.)

$2,500,000 of Northern Pacific Railway common stock, valued on the books at 10 per cent and sold subsequently with some additional stock acquired and used in exchange for capital stock of the Washington Central Railway at an average rate of 26.35 per cent. (The first quotation for this stock was 12¼ per cent.)

$528,100 Northern Pacific Railway prior lien bonds valued on the books at 80 per cent and sold subsequently $10,500 at 80 per cent and $517,600 at 94¾ per cent. (The first quotation for these bonds was 85⅞ per cent.)

$440,000 Northern Pacific Railway general lien bonds valued on the books at about 60 per cent and sold subsequently for 60+. (The first quotation for these bonds was 51 per cent.)

(In addition to these bonds, held as treasury securities, there were $2,210,000 of general lien bonds valued at 60 per cent in the betterment and enlargement fund, and sold subsequently for 68¼ per cent.)

Since the reorganization the prior lien bonds issued have been increased, (after deducting $4,665,500 bonds purchased and canceled in accordance with Article 8 of the mortgage,) to $106,984,500, a net increase of $32,172,000. Of this amount there were on hand in the treasury unsold April 30, 1908. $1,500,000.

Of the increase named $19,381,050 of bonds were sold for $19,911,225.97. Of this amount there was in the hands of the trustee April 30, 1908, $322,724.98, leaving, as shown in exhibit No. 16, $19,588,560.99 as net cash proceeds.

The general lien bonds have been increased by the issue and sale of $4,000,000, making the total issue $60,000,000. The bonds were sold for the sum of $2,920,000.

The Nor. Pac. R. R. genl. 1st mtge. bonds,.....$15,392,000
General first mortgage conversion fund,.....4,617,500
Missouri division bonds,.....1,755,000
and Western R. R. of Minnesota bonds,.....420,000

outstanding at the time of the reorganization have all since been retired.

The St. Paul & Northern Pacific Railway general mortgage bonds have been increased by the issue of $18,000 of bonds in substitution.

The St. Paul & Duluth Railroad was purchased in 1900. In order to provide for this a purchase money mortgage was placed upon the newly acquired property bearing interest at 4 per cent per annum, known as Northern Pacific Railway Co. St. Paul-Duluth Division Mortgage Bonds. Of these bonds there were sold.....$9,860,000 for $9,398,227.78

of which there have been redeemed under the terms of a contract of Nov. 15, 1900.....	2,339,000 "	2,361,435.03
	$7,521,000	$7,036,792.75
Issued to retire St. P. & D. R. R. securities	381,000	
	$7,902,000	
There was on April 30, 1908, provision for further redemption amounting to		1,638,564.97
Leaving net cash proceeds of.....		$5,398,227.78

as shown in Exhibit No. 16. (Of these bonds there were in the treasury April 30, 1908, $361,000.)

In the purchase of the St. Paul & Duluth R. R. the following indebtedness was assumed by this Company:

St. Paul & Duluth R. R.	1st mtge. bonds	$1,000,000
"	2nd mtge. bonds	2,000,000
"	1st consolidated mtge...	1,000,000
"	Taylors Falls & L. S. mtge.	210,000
"	Duluth Short Line mtge.	500,000
"	Car trust notes (Bal. unpd.).....	19,257.66

(The Company also assumed the Minneapolis & Duluth R. R. mortgage of $280,000, which has since been retired.)

July 1, 1907, the stock and income bonds of the Washington & Columbia River Ry. Co. were purchased, and the outstanding first mortgage bonds of that company, amounting to $2,620,000, were assumed by this Company.

During the fiscal year ending June 30, 1901, this Company, in connection with the Great Northern Railway Company, purchased nearly the entire issue of the capital stock of the Chicago, Burlington & Quincy R. R. Co., for the joint account of the two first named companies, on the basis of an issue of joint bonds of the purchasing companies (bearing interest at the rate of 4 per cent per annum, maturing in twenty years and containing a reservation of the right to retire the same after five years at 105 and accrued interest) at the rate of 200 per cent of the par value of the Chicago, Burlington & Quincy R. R. stock.

In accordance with this purchase this Company expended for its one-half of the cost of the Burlington stock $109,114,309.76, and assumed as its one-half of the N. P.—G. N. joint C. B. & Q. collateral bonds issued $107,613,000.

At a meeting of the stockholders of the Company held Janu-

ary 7, 1907, an issue of $93,000,000 new capital stock of the Company was authorized. Such stock has been offered to stockholders of record December 31, 1906, ratably at par, the amount of subscriptions therefor to be paid in installments from time to time. Under this subscription up to April 30, 1908, the Company had received $60,539,634.99, as shown in Exhibit No. 16.

Q. I call your attention, Mr. Gray, to your testimony given on the 26th day of June, in which you read into the record a letter from George H. Earl, the secretary of the Northern Pacific Railway Company, dated February 14, 1907, addressed to Howard Elliott, president of the Northern Pacific Railway Company, in St. Paul. The letter recites that "All subscriptions to the new stock not filed on January 15th have been passed upon by Mr. Hill and where authorized, subscription receipts have been issued." That letter, as I remember it, was read into the record to correct your former testimony that any delayed subscribers, if permitted to subscribe, were permitted by the grace of J. P. Morgan & Company. Do you know whether or not any stockholders in the Northern Pacific Railway Company, whether they offered their subscriptions prior or subsequently to January 15, 1907, were refused permission to subscribe to new issues of stock on the ratable basis provided?

A. I have never heard of any being refused permission to subscribe.

Q. Who is the Mr. Hill referred to in the letter of Mr. Earl to Mr. Elliott?

A. James N. Hill, Vice-president of the Company, in New York.

Q. Do you know what his functions are as Vice-president of the Company?

A. Well, to begin with, the usual functions of a vice-president; he is next in rank to the president and takes his place

in his absence, performs all the duties and assumes all the responsibilities of the president in his absence; and, being located in New York, he has especially to do with financial matters of the Company that are transacted there as being the financial center of the country.

Q. Have you been advised, Mr. Gray, that at the time of these new stock subscriptions, the board of directors were informed, by both Mr. Bunn and Mr. Stetson, the general counsel of the Company, that they had no right or power to bar any stockholder from subscription whether or not he applied for subscription within the time limited by the first resolution of the directors?

A. I have had no official advice of that nature; I have heard it stated in conversation.

Q. I call your attention to Defendants' Exhibit V—Gray. It is headed "Cost of Construction and Equipment of the Northern Pacific Railway from September 1, 1876, to June 30, 1907," and purports to give in detail figures from the annual report of the officers to the stockholders or from the Railway Company to the Railway Commission of the state of Minnesota, from year to year, 1876 to 1907, inclusive. The exhibit bears the following upon its face, "Correct. H. A. Gray. 7-31-08." To what was the word "Correct" intended by you to be applicable?

A. Simply to the fact that the statement had finally been corrected. It was not put on as a formal certification of the statement as a statement.

Mr. O'BRIEN: I would just as soon make a statement as to that, that will probably relieve you, if you are in any way embarrassed by Mr. Gray's statement. We never claimed that this was a statement from Mr. Gray that that statement represented the correct construction account; all that we claimed was that it was a correct transcript of those records and that Mr. Gray was required to say whether it was correct or not

upon the assumption of our theory of the compilations.

Mr. How: That is satisfactory. Thank you.

Q. I will now ask, Mr. Gray, whether or not these figures have been correctly transcribed from these several reports and whether the totals are accurate.

A. I believe the statement as now submitted to be a correct transcript of the corrected Exhibit V.

Q. And that the totals are accurate?

A. And that the totals are now accurate.

Q. There appears between the respective totals of Equipment and Construction as set forth in Defendants' Exhibit V—Gray and as set forth in your Exhibit No. 15 a difference in the figures, with regard to Construction amounting to $90,480,950.39, and with regard to Equipment of $5,024,731.09. Have you prepared a statement showing in detail what those differences are and how they are made up?

A. I have.

Q. Will you produce that statement?

Witness produces statement, which is marked for identification "Complainant's Exhibit 28—Gray."

Q. From what sources was this Complainant's Exhibit 28—Gray compiled?

A. From the books and records of the former and present Companies.

Q. Is it an accurate statement as disclosed by those books?

A. It is.

Mr. How: It is offered in evidence.

The MASTER: I understand it is to be used in connection with Exhibits 15 and V?

Mr. How: Yes, sir.

Q. Darling's Exhibit 2 and Darling's Exhibit 3 in this case each contains an estimate made by Mr. Darling of the present cost of construction of the Northern Pacific road, one of the entire System, and the other of the System within the state of

Minnesota alone. The estimate is in two chapters. The first chapter as of date June 30, 1906, as the road then existed, and the second of actual disbursements since that date, the figures for which Mr. Darling has testified he obtained from your office. Will you state whether or not those figures have been checked up by your office,—those furnished to Mr. Darling.

A. They have.

Q. Will you state whether or not the figures so furnished to Mr. Darling and used by him are accurate as disclosed by the books and records of your office?

A. I believe them to be so.

Q. In your testimony given on the 23d day of June, 1908, you were asked if you remembered generally what had been the average price of the lands realized by the Company; your answer was, "I could not give it in exact figures, but I think it would be not more than two dollars and a half an acre." Do you desire to correct that statement?

A. Only to this extent, that I am not able to give exact figures now, but from examining into the records I am satisfied that the average amount received was considerably less than two dollars per acre.

Q. You have somewhere in your testimony (and the location in the record of it I cannot indicate now) testified that the certificates for dividends issued by the Company as of date January 1, 1883, were never paid in cash but were provided for in the reorganization of 1896. Do you desire to correct that testimony?

A. Yes; I find that the greater part of them were paid in cash, and some of them were extended.

Q. At what time were they paid in cash?

A. They were paid in December, 1887, and in January, February, March, April, May, June and July 1888, and on through 1891 and 1892; a small amount of them between March, 1892, and August, 1893.

Mr. O'BRIEN: Those are the same certificates that are described in your testimony, giving the financial history of the Company, are they not?

WITNESS: Yes.

Q. In your Exhibit No. 28 there is an item of Discount on Bonds, amounting to $17,569,743.26. Has the Interstate Commerce Commission prescribed rules for accounting departments of railway companies under its jurisdiction?

A. It has.

Q. Has it made any provision covering such an item of discount on bonds as you include in your Exhibit 28 as above recited?

A. I have in my hand a classification of construction and equipment expenditures as prescribed by the Interstate Commerce Commission in accordance with Section 26 of the act to regulate commerce, in which provision is made for charging discount and commission.

Q. Does it show the date when the order was issued by the Commission, or do you know when it became effective?

A. This order was issued December 15, 1905.

Q. It is in effect now, is it? Are you governed by it?

A. Not now; it ceased to be effective on the first of July, 1907, but it was in effect at the time at which this statement was made up.

Q. Will you read the provision into the record?

A. "DISCOUNT ON COMMISSION. To this account should be charged discount on securities sold, commission on loans effected and on notes issued for equipment purposes and discount and exchange on other commercial paper issued for a similar purpose. Premiums realized from sales of bonds, stock or other securities sold for equipment should be credited to this account. (Interest on equipment bonds, car trust notes or other equipment obligations should not be charged to this account.)"

Q. And did you keep your accounts in accordance with the instructions of the Interstate Commerce Commission?

A. Substantially. I would say as to that, that besides these construction and equipment expenditures, we were keeping betterment and enlargement expenditures, and there was some difference in the classification, and when it became a question of harmonizing in the statement it was a difficult matter. It is one of the things that the representatives of the Commission are trying to deal with at the present time—the harmonizing of the classification of additions and betterments with the classification for construction and equipment, so that in the reports to the commission, and also to such state commissions as adopt their classification, these expenditures can all be put in in a uniform report and under a uniform list of headings. The Commission has not yet reached the point of promulgating a classification of additions and betterments; they will probably do so during the current fiscal year.

Q. You know of no further corrections in your testimony?

A. There is one. In looking over the testimony myself, I seem to have gotten mixed in an answer to Mr. Durment. He asked me whether in my Exhibit 15 the depreciation on equipment had been taken out and it seems that I said yes; on the succeeding page I contradict myself, apparently.

Q. Which is right?

A. The contradiction is right,—that in this statement the equipment is all in at what it cost and no deduction has been made for depreciation.

Q. Is there any further correction you desire to make in your testimony?

A. I don't remember of anything else.

The witness here produced certain statements which had been called for by Defendants' counsel, and the same were marked, respectively, Defendants' Exhibit AA—Gray, Defendants'

Exhibit AA—Gray Supplement and Defendants' Exhibit BB—Gray.

Adjourned until Monday morning, September 21, 1908.

FEDERAL BUILDING, Monday, September, 21, 1908, the hearing was resumed at 10 o'clock A. M.

JOHN B. DARLING,

recalled for further cross-examination, testified:

By Mr. DURMENT:

Q. Mr. Darling, you were requested to furnish us a detailed statement of the average cost of one mile of main track in Minnesota, and one mile of branch lines and sidings in Minnesota; have you done so?

A. Yes, I have made such a statement on top of the subgrade after it was completed.

Q. You didn't make any statement including the grading?

A. No, sir.

Q. Will you produce that, please?

A. There is the Cost of One Mile of Branch Lines and Sidetracks, (producing sheet) and there is Cost of One Mile of Main Track, (producing second sheet).

The statements were marked for identification Defts' Ex. FF —Darling.

Q. Ex. FF, page 1, is the statement you furnished for average cost of one mile of main track, and Ex. FF, page 2, the average cost of one mile of branch lines and sidetracks in Minnesota, I understand?

A. Yes, sir.

Q. Why did you not include the cost of grading per mile, too?

A. Because I was asked for the cost of a mile of track, in order to compare with what we had on the System estimate.

Q. Well, have you the figures on the average cost of grading a mile of main track, and the average cost of grading a mile of sidetrack and branch?

A. What do you mean by grading?

Q. Well, what you mean by grading in your tables.

A. Yes, sir, I could do that.

Mr. HOW: When you refer to "cost" I take it that you mean not the actual cost, but the estimated present cost, in this testimony?

Mr. DURMENT: Well, I mean by that what he figures would be the cost at the present time on the average.

Mr. HOW: That is right.

Q. And I understand the Exhibit FF, pages 1 and 2, show what the figures would be, the average cost at this time, of present construction?

A. Yes, for reproducing. I understood that estimate was to be made when compared with this estimate made for the System for cost of one mile of main track.

Q. Referring to your Exhibit No. 2?

A. Yes, sir.

Q. Is this statement made up upon the basis of the road doing this work itself, or letting it by contract?—Ex. FF I mean.

A. Well, either way.

Q. Either way there would be no difference, you think?

A. Practically, no, sir.

Q. Now, your main lines in Minnesota are between Duluth and St. Paul, St. Paul and Moorhead, Duluth and Moorhead, are they not?

A. Yes, sir.

Q. Those are the main lines?

A. Yes, sir.

Q. The distance between Duluth and St. Paul is about 153 miles?

A. Something like that, yes, sir.

Q. And from Duluth to Moorhead?

A. It is about 250 miles.

Q. And from St. Paul to Moorhead?

A. Well from St. Paul to Staples would be 142 miles, I think.

Q. You have no main line from Staples on?

A. Yes, sir, it is the same line.

Q. The same line from Staples on?

A. Yes, sir.

The MASTER: That is, as from Duluth?

WITNESS: As from Duluth.

Mr. HOW: The lines from Duluth to Moorhead and from St. Paul to Moorhead conjoin at Staples.

Q. I notice in this statement Ex. FF, page 1, "Tie-plates St. Paul or Duluth .59 net tons at $44.32." On what proportion of your main line in Minnesota, as it is today, do you use tie plates?

A. When a line is fully tie-plated, there is about 7½ tons of tie-plates to the mile.

Q. That isn't the question. How many miles of your main lines in Minnesota do you use tie-plates on, at the present time?

A. Well, I was going to explain that—

Q. All right.

A. —in this way. When a line is fully tie-plated there are 7½ tons per mile. These main lines average about .6 of a ton per mile, so there would be about two to three per cent of the total main line tie-plated.

Q. Then you average, upon the basis of your entire main lines in Minnesota, all the tie-plates you have in use at this time?

A. Yes, sir.

Q. And how many miles have you tie-plated?

A. Well, I couldn't tell; the details would show that.

Q. Your details will show it, you say?

A. Yes, sir.

Q. That you have here?

A. Yes, sir; I don't know whether they are here or not, but we have details that will show the number of tie-plates, approximately.

Q. 7½ tons to the mile is the average, is it?

A. Yes, sir.

Q. When it is fully tie-plated?

A. Yes, sir.

Q. Your details of the line in Minnesota, Ex. 3, does that show anything about the tie-plate situation in Minnesota?

A. No, sir, I think not; I think we would have to go to the detail sheets for it.

Q. Well, we will ask you to furnish us the number of miles of main track in Minnesota which is tie-plated, and also the full amount of tie-plates on them.

A. That would probably mean that we would have to count them; or shall we take our records for it?

Q. Oh, I suppose we will take your records on that, unless you have time to count them between now and tomorrow or next day. I notice here on this Ex. FF-1, you start with your rails f. o. b. at St. Paul or Duluth. Now, that would give you what would be the average haul for rails, then, on that line?

A. I don't remember the average haul, but the cost—

Q. I know, but you can tell from those distances you gave me, can't you? From Duluth to St. Paul is 153 miles, and you would haul your rails from either place?

A. Yes, sir; that is about seventy miles average haul; and the other would be about 125 miles.

Q. From Duluth to Moorhead, 125 miles?

A. Yes, sir; it is 70 from here to Staples.

Q. From here to Staples would be—

A. 70 miles, average.

Q. What is the distance from Staples to Moorhead?

A. About 108 miles, approximately.

Q. Then the average haul on the main line between Duluth and St. Paul for rails would be 70 miles, whichever end you haul from?

A. 75 miles. I have forgotten just exactly; these are approximate figures I am giving.

Q. The 153 miles, I understand, is the distance; it would be 78, then; that would be 76½-77 miles. From Duluth to Moorhead the average haul would be 125 miles?

A. Yes, sir.

Q. And from St. Paul to Moorhead the average haul would be the same?

A. Well, that is a common line between Staples and—

Q. I know, but it is 142 from St. Paul to Staples and 108 from Staples to Moorhead, which would make it 250 miles, the same as from Duluth?

A. There is really about six or seven miles difference between the two lines.

Q. Which is the longer?

A. The longer is from Duluth to Staples and then to Fargo.

Q. Then 125 miles from Duluth to Moorhead, would be the average haul, and the average haul from St. Paul to Moorhead would not exceed 125 miles?

A. No, sir. Of course, it depends somewhat upon the kind of steel laid. These are approximate figures of cost. Heavy steel might be laid on the west end and the light steel on the east end.

Q. Might be, but what are the facts as the road exists today?

A. It is very close to an average.

Q. That is what I thought, and your statement is made up on the basis that it is an average, isn't it?

A. No, my statement is made on the basis of the actual num-

ber of tons of steel in the track divided by the number of miles.

Q. But you have made it up upon the theory that the weight of steel is about on an average throughout the System, haven't you?

A. Oh, no.

Q. I mean so far as the main track is concerned.

A. No, sir, not as far as freight charges are concerned, because from Duluth to Staples a great portion of that is 66-pound steel, while from St. Paul to Staples a great portion of it is 72 and some 85, and from Staples west to Fargo it is mostly 85 pound steel.

Q. But this statement, Ex. FF, of an average cost per mile, must necessarily be upon the theory that it is about the same?

A. No, sir. No, this statement is made up from our actual estimate as returned for Minnesota valuation. Now, we take the actual traffic charges against steel in Minnesota and divide it by the number of miles. Now, those charges are made up, for instance, from Duluth to Staples, of 66-pound steel multiplied by the tariff rates between Duluth and the center of gravity of haul. Therefore that mileage would be entirely different from—

Q. But this statment is a statement of the cost per mile of one mile of main track in Minnesota, at which end of your line?

A. An average of either.

Q. That is what I said a minute ago: That this statement, Ex. FF, proceeds upon the theory that it is the average cost.

A. Yes, sir.

Q. And that is upon the theory that it is about the average haul on steel, and that everything else is about the average all over the line?

A. That is, you can assume that it was.

Q. You have to assume it to make this statement Ex. FF?

A. No, sir. We took traffic for this statement, and divided it by the number of miles; that gives us an average, but it

doesn't mean that there is an average.

Q. It doesn't mean that there is, in fact, an average?

A. No, sir.

Q. But it means that this statement is made up upon the basis of an average?

A. Yes, sir.

Q. And upon the basis of everything being distributed over the entire miles of main line?

A. Yes, sir.

Q. I find here cross-ties $1,860 in this Ex. FF, page 1; that is the price of the ties themselves?

A. Yes, sir.

Q. I find here ballast $1,967.20; that is the cost of the ballast, I suppose, at the ballast quarry, or wherever you got it?

A. No, that is the price of the ballast under the tie and track.

Q. That includes labor and all?

A. Yes, sir.

Q. Transportation of ties, rails, etc., $718.76. Now, what is included under your term "etc.", there?

A. Track-fastenings and frogs, and switches.

Q. That is transportation of ties, rails, and what else?

A. Track-fastenings.

Q. What do you call track-fastenings?

A. Spikes, bolts, angle-bars, tie-plates.

Q. Spikes, bolts, tie-plates?

A. Angle-bars.

Q. Tie-plates, angle-bars. Is there anything else in that?

A. Switches and frogs.

Q. Have you got that included in your estimate here?

A. Yes, sir.

Q. Where is that? In what item in this Ex. FF, page 1, do you find your switches and frogs?

A. Well, no, it doesn't include switches and frogs; I am

mistaken about that, except in the cost of track-laying and surfacing. There the turnouts are included.

Q. But no item of cost of laying track and surfacing is included in your transportation of ties, rails, etc., is there?

A. That is all labor.

Q. Is included in transportation of ties, rails, etc?

A. No, sir, it couldn't be, because that item is labor.

Q. Now, then, what is there, if anything, which is included in this Ex. FF, for which an allowance is made in transportation of ties, rails, etc., your last item there of $718.76, other than ties, rails, spikes, bolts, tie-plates, angle-bars?

A. In the cost of laying track and surfacing we include the cost of putting in one extra switch per mile, labor.

Q. That is included in your $392.15?

A. Yes.

Q. And is not included in your $718.76?

A. No, sir.

Q. And there is nothing in the $718.76 that is included in the $392.15?

A. No, sir.

Q. Nor nothing whatever in that item cost of track-laying and surfacing?

A. No, sir; that is, there is no duplication.

Q. That isn't the proposition. I want to know just exactly what you cover in these items here, in the $718.76 and $392.15.

A. Oh, that item ($718.76) covers ties, rails, angle-bars, bolts and nuts, spikes.

Q. I suppose that bolts and nuts are all under that item "Bolts".

A. Yes, sir.

Q. And the spikes?

A. Tie-plates; that is all.

Q. There are 116.88 tons of rails to the mile?

A. That is the average.

Q. And 6.8 net tons of angle-bars; that is right, isn't it?

A. Yes, sir.

Q. And .688 tons of bolts and nuts?

A. Yes, sir.

Q. And 3.34 tons of spikes?

A. Yes, sir.

Q. And .59 of a ton of tie-plates?

A. Yes.

Q. Now then, there are 1,860 ties, on the average?

A. That is cost.

Q. Well, how many ties?

A. About 3,000 ties.

Q. And what is the average weight of a tie?

A. 200 to 250 pounds.

Q. You say the average is 200?

A. Yes, sir, about 200.

Q. That would be how many tons to a mile?

A. About 300 tons.

Q. Where do you get your ties, usually?

A. Why, a great many of them up on the Minnesota & International; some of them delivered along the track between Duluth and Superior, some of them delivered at Duluth.

Q. You never get any ties delivered along the line between Duluth and Staples, then?

A. Oh, very few now. They used to get a good many, but very few now.

Q. How about along the line between Staples and Moorhead?

A. Well, hardly any now. We get some at Detroit.

Q. And between St. Paul and Staples?

A. Very few.

Q. Then you have about the same average haul for ties that you would have for the other material?

A. Oh, I should judge so; that is, for steel.

Q. About the same as you would have for steel, that is what I mean.

A. I should judge so off-hand, yes, sir. I would like to modify that a little and say it is a little bit less for ties than it is for steel.

Q. How much do you think?

A. I should think that ties would average 150 miles.

Q. Well, that is a higher average, then, than for steel, isn't it? Your highest average for steel is 125 miles?

A. Yes, it is 125.

Q. That is right, isn't it?

A. Well, I guess it is about the same distance for ties that it would be for steel.

Q. Now, then, as I understand it, Mr. Darling, (and I would like you to verify some of the figures, perhaps) there would be, according to this Ex. FF, page 1, a haul of 428.298 tons of steel and other material?

A. 428.268 tons.

Q. Now, at what rate per ton per mile did you figure?

A. Traffic charges, tariff rates.

Q. Well, what is the tariff rate?

A. Well, I couldn't say, because it varies with the different kinds of stuff moved.

Q. You can't tell what the rate there is?

A. I can't tell you from this, no, sir.

Q. I find in your Ex. 2 under "Cost of one mile of main track" an "average haul for steel and trimmings 1,000 miles at .4 of a cent per ton per mile."

A. That was what was used in the System estimate.

Q. And I find, also, that your average haul for ties 400 miles, was put at .4 of a cent per ton per mile there.

A. Well, I would just say this: As a general rule, the System estimate was made up of traffic charges at the rate of .4 of a cent a mile. That statement was made up on tariff rates.

Q. Why? because tariff rates were higher or lower than .4 of a cent per ton per mile?

A. No, because it was assumed that tariff rates was a proper charge to make.

Q. Why would tariff rates be a proper charge to make as against Minnesota and not a proper charge to make as against the System?

A. For this reason: That when the System estimate was made for the Interstate Commerce Commission, Mr. Bunn asked that we estimate .4 of a cent per ton a mile for traffic charges in that estimate. Well, then, when we came to Minnesota, it was a question whether .4 of a cent a ton was a proper charge in the face of the Interstate Commerce Commission's orders, so this estimate was put in at tariff rates. Now, I don't know whether that was correct or not.

Q. Do you know whether that was greater or less than .4 of a cent a mile?

A. Oh, I presume it was greater.

Q. Otherwise you would not have put it in, would you?

A. Oh, yes.

Q. Well, at any rate, in making up your estimate of the System and the cost of it, you have figured the cost of transportation for the System as a whole, usually, at .4 of a cent per mile?

A. Yes, sir.

Q. And yet when you came to make up your estimate for Minnesota you say you figured it at something different?

A. Yes, sir.

Q. And something greater?

A. Well, I figured it at tariff rates.

Q. Well, is that greater or less?

A. Well, yes, that is generally greater.

Q. In your Ex. 3 the estimated cost of reproducing the Northern Pacific Railway System, you have not, in any of your details of that, given us the rate per ton per mile for hauling

included in that exhibit, have you?

A. No, sir, I don't think so; but, as a matter of fact, tariff rates were used.

Q. Will you look through and see?

A. Yes, sir, there are prices here on page 10 and page 13.

Q. Those are your prices, but I am asking for your freight prices, your transportation charges.

A. That is what I have reference to.

Q. Now, let us see; where is that?

A. Page 10, rates on machinery, carload lots.

Q. Carload lots of machinery?

A. Yes, sir.

Q. Would you haul steel and ties as machinery?

A. It would be hauled under its direct classification, whatever that is. Wouldn't be machinery; that refers to anything that would come under that heading.

Q. Does steel and rail come under that heading?

A. No, sir, it would not; that is a special class.

Q. Where do you get it for your steel and rails?

A. I don't think it says here for steel. Now, on page 13, although it doesn't give the tariff charges, it shows how much freight we included for stations.

Q. But I am asking now with reference to ties and steel.

A. No, sir, I think they are not shown there. There is for joints. It doesn't give the exact prices. It simply says the freight is given by the freight department.

Q. Then you have included here $718.76 for transportation of material in one mile of track of 428.268 tons; how much would that be per ton?

A. About $1.68 a ton.

Q. $1.68 per ton per mile?

A. No, sir, $1.68 a ton.

Q. Then if the average haul was 77 miles (that is between

Duluth and St. Paul) how much would that be per ton per mile?

A. Well, that would not be a fair way of treating it.

Q. Well, answer the question, will you?

A. Yes, sir.

Q. You said the average haul between Duluth and St. Paul on these things would be 77 miles; now, how much would that be per ton per mile at $1.68 a ton?

A. About 2.2 cents, approximately.

Q. Now, as a matter of fact, you say here on this schedule that you take steel from both St. Paul and Duluth; if you took steel from both directions, from both places, for making the main line between Duluth and St. Paul, your average haul would be 38½ miles, wouldn't it?

A. Yes, sir.

Q. Now then, on an average haul of 38½ miles, what would be your rate per ton per mile at $1.68?

A. I can answer your question as a question, but I am frank to say that it is not practical to do it.

Q. We will find out about that later; I am asking you for an answer to the question now.

The question was read.

A. About 4.4 cents per ton per mile.

Q. On an average haul of 125 miles, what would be your rate per ton per mile?

A. About $.0134; 1.34 cents.

Q. Now, if we charge .4 of a cent per ton per mile for Minnesota, as you have charged it in making your estimate for the System, what would be the cost of transportation of this 428.268 tons for each of these distances, average haul 38½, 77 and 125 miles?

A. I can't answer the question the way you ask it.

Q. Why not?

A. You ask me what would be the cost at .4 of a cent per

ton per mile for these districts. Now, based on your assumption, as you have carried it through in all these questions, I can give it to you.

Q. Taking the 428.268 tons, which is the number of tons you have included in this Ex. FF, page 1, at $718.76; now, if we figure at .4 of a cent per ton per mile, how much would it be for each of the hauls 38½ miles, 77 miles and 125 miles?

A. On the 38½ mile haul it would be $66.02 a mile; on the 77 mile haul it would be $132.03; on the 125 mile haul it would be $214.34.

Q. Now, will you tell us, figuring at the rate of .4 of a cent per ton per mile, what is the average haul that you would have on this $718.76?

A. At the rate of .4 cent per ton per mile and figuring $718.76 a mile?

Q. Yes, as you have it here, what would be your average haul?

A. About 17,969 miles.

Q. Well, it is between four and five hundred miles, as I remember it.

A. Then you gave me the wrong figure to work from. $718 a mile?

Q. $718.76 is the amount you have included here. Maybe my question is not intelligible.

A. I figured it for one ton. I may have misunderstood your question.

Q. What I had in mind was this: If you took the number of tons which is shown by Ex. FF-1, to have been hauled to make that mile of main track and took the $718.76 as the amount it was worth to haul it, and also assumed that it was charged for at the rate of .4 of a cent per mile, that would give you an average haul?

A. Yes, sir.

Q. And that is what I wanted.

A. About 418 miles.

Q. Now, you said it was not practical to work from both Duluth and St. Paul in laying steel rails and ties in building the main line between St. Paul and Duluth, as I understand it?

A. Yes, sir.

Q. Why not?

A. If you were going to build the line between St. Paul and Duluth, you would have to figure where you wanted that material delivered, whether at Duluth or St. Paul, or whether you could arrange the grading so that it could be delivered either from Duluth or from St. Paul. The chances are that, practically, it would all have to be delivered at St. Paul, because the work at the Duluth end would be the very last thing done and you would have to haul all your material from St. Paul and lay your track from St. Paul.

Q. Why are the chances it would be the last thing done?

A. Because there is very much heavier work up there.

Q. Is it unusual at all for them to begin work, where they are building a new railroad in there, to begin at both ends and work towards the middle?

A. Always done.

Q. Then why couldn't it be done in the case of between St. Paul and Duluth?

A. Because there are always controlling features in the construction of a road, and it is those controlling features that limit the time within which that work can be done. Now, from St. Paul to Carlton, it is moderate construction, work can be done very easily and quickly; but from Carlton to Duluth, it is extremely heavy work and will take a very long time to do it, and it would be the very last piece of grading done. They could do all the grading on this end, lay all the track, finish all the building, get everything complete clear to Carlton, before they could get the grading done between Carlton and Duluth.

Q. They could?

A. Yes, sir, and they would.

Q. If they began at the same time at Duluth and worked both ways?

A. Yes, sir, undoubtedly.

Q. Couldn't you utilize the Great Northern between Duluth and Carlton to get your material?

A. At tariff rates, yes, sir.

Q. Well, you have charged tariff rates, anyway, haven't you? You say you have.

A. Yes, sir.

Q. Is there any reason why, if you are going to charge tariff rates on the Northern Pacific, you couldn't get it hauled over the Great Northern at tariff rates, too?

A. No, sir, I think we perhaps would work out to haul the stuff from Duluth to Carlton and unload it, transfer it, but that would cost more than it would if you paid the freight from St. Paul up on your own road.

Q. Well, you don't have to lay your track before you grade, do you?

A. No, sir.

Q. And you could do your grading and begin to lay your tracks from Carlton towards St. Paul, couldn't you?

A. Certainly.

Q. And you always have to unload when you lay your tracks?

A. Not always; you should, but not always. But if—

Q. Now, as a matter of fact, with the Great Northern there, it is entirely practical to build that line between St. Paul and Duluth from both ends, isn't it?

A. Yes, sir, but not to lay the tracks from both ends.

Q. And to lay the tracks from both ends?

A. No, sir.

Q. To deliver your steel from both ends?

A. Yes, sir, you could by delivering from the Great Northern at Carlton, but that would cost you more than it would to deliver it here at St. Paul, probably.

Q. Why?

A. On account of transferring from one road to another, paying the transfer charges, if any, doing the unloading and paying for—

Q. Isn't there such a thing as putting on your own cars and switching with them?

Mr. How: May I request to have the witness permitted to complete his answer?

The MASTER: If he indicates to counsel that he has not completed his answer, of course the counsel won't interrupt him.

WITNESS: I would just like to say that if they made arrangements with the Great Northern, or any foreign company to deliver the steel at Carlton, they certainly would not furnish their own cars.

Q. Who wouldn't—the Northern Pacific?

A. No, sir.

Q. It is true that railroads run their cars from one line to another?

A. When they have to, yes, sir.

Q. And is there any reason why the Great Northern wouldn't switch its cars at Carlton onto your line down?

A. Its own cars?

Q. Yes.

A. No, sir, not that I know of.

Q. And there wouldn't be any more switching charges than there would be switching your cars, would there?

A. I don't know what the arrangement would be between the two companies.

Q. You say if you brought it from the Great Northern you wouldn't haul it in your own cars. I notice in your schedule Ex. 3 of the value of the line in Minnesota, you have Miscel-

laneous Equipment and Freight-car Equipment; Miscellaneous Equipment, $186,407, and Freight-car Equipment, $6,173,348.78, and, also, Locomotives, $3,263,374.64.

A. Yes, sir.

Q. That equipment includes construction equipment, doesn't it?

A. No, it doesn't include construction equipment.

Q. What item there does include construction equipment?

A. There is no such thing here.

Q. Have you equipment on your road which you use for construction purposes?

A. Yes, but we pay rent on it.

Q. You don't own it?

A. No, sir. The Northern Pacific owns it, but the construction department doesn't own it. They pay rent.

Q. But the Northern Pacific owns it?

A. Yes, sir.

Q. And that is included in these items here?

A. Yes, sir.

Q. So, then, upon the basis o. your value of this road, the Northern Pacific would have the equipment, wouldn't it?

A. Oh, I can answer that question best by saying that today we haven't got anywhere near enough equipment for our construction purposes, that we have to rent it outside.

Q. You rent outside. You have additional equipment, but you also have a large amount of construction equipment?

A. Yes, sir, we have some construction equipment, but most of it is really equipment in the freight service that we change over and use for construction whenever necessary.

Q. You are building a lot of railroads in other states than Minnesota, at this time?

A. Yes, sir.

Q. And that is the reason you are short of equipment, isn't it?

A. Yes, sir.

Q. If you were building only the lines in Minnesota, you wouldn't be short of equipment?

A. It would depend entirely on how long a time we had to build it in.

Q. Well, how long a time did you have to build it in?

A. Eight years or ten years.

Q. Well, you would have enough to build it, upon that theory now, wouldn't you?

A. Not with our present equipment, no, sir.

Q. And you didn't use your own equipment in the actual construction of the road as it is now?

A. I think we did, entirely.

Q. That is what I thought. Then, in making up your valuation here, you are including in your total value in Minnesota the equipment which has been used, or could be used, in the construction of the road?

A. It could have been used had we had it when it was constructed, yes, sir.

Q. And you did have equipment of your own to construct it, very largely?

A. None of this was used in the construction of the road.

Q. That may be, but when you did construct your road you had construction equipment which you used almost entirely, belonging to the road, for the purpose of constructing new lines?

A. Any of those portions I had charge of I know we did; as to the others I couldn't tell you.

Q. And they were of the same class as this equipment included in your Ex. 3?

A. Practically, yes, sir.

Q. It has been worn out and put out of service?

A. Yes, sir.

Q. And it has been replaced by this?

A. Yes, sir.

Q. So, then, as a matter of fact, in making up your valuation, you are including as a part of the valuation the cost of equipment which, if you were constructing your road, could be used for construction—

A. Yes, sir.

Q. —and also including in these various items a rental on that equipment?

A. Yes, sir.

Q. Now, on the matter of track-laying and surfacing, how much do you include for the labor of track-laying alone, and how much for surfacing alone?

A. Well, that track-laying and surfacing is made up in the way I thought you wanted it, and that was to give an average cost in Minnesota for laying track and surfacing as it exists to-day, reproducing it.

Q. Now, I ask you how much of that is for labor, how much for surfacing and how much for track-laying.

A. I couldn't give you that here without a great deal of detail work.

Q. You had the details when you made your figures, didn't you?

A. Yes, sir, we had those details from which that can be made.

Q. Have you the details from which you made that particular figure? That is what I want to know.

A. Yes, sir; not here, but we have them.

Q. And you can produce them this afternoon?

A. Yes, sir.

Q. All right.

A. I can produce the details, but I don't know as I could have this question worked out for you this afternoon.

Q. I suppose you had to work it out to make up your statement, didn't you?

A. Yes, sir, those were all worked out, but it was a very intricate piece of work to get that out. It is a great deal of work to go through all those details.

Q. You didn't save your figures?

A. Yes, sir, the figures are all saved.

Q. Now, take your Rent of Equipment; what does that cover? You have got here Rent of Equipment, Train Service and Handling to the Front. What does Rent of Equipment cover?

A. It covers rent of engines and all kinds of equipment engaged in construction service.

Q. Well, how many engines and what kind of equipment would there be?

A. For track-laying or for ballasting?

Q. Well, this is for track-laying, I suppose.

A. For track-laying we would have to have engines of different classes; we would have to have track-laying machines under this way of reproducing the track. We would have to have boarding-cars, flat-cars and then equipment for hauling out rails, ties, etc., to the front.

Q. That would be flat-cars?

A. That would be flat-cars, box-cars or stock-cars, whichever way the rail came in,—on which we would have to pay demurrage.

Q. Well, this Rent of Equipment, then, in the first place, covers the rent of engines, boarding-cars and cars, flat-cars, would it not, and track-laying machine?

A. Yes, sir.

Q. That is all it does cover, isn't it, in just the term "Rent of Equipment"?

A. Yes, sir.

Q. And that is upon the assumption that the Road does not own them or would not own them, but would rent them?

A. No, no, it is on the assumption that they own them or

ent them, either one.

Q. It doesn't make any difference which?

A. No, sir.

Q. If you own them you charge them in as a part of the ost of the road?

A. We would charge the rent of it as a part of the cost of he road.

Q. No, but you would charge under the head of Equipment, n making up your estimate of the complete System, all that equipment as a part of the road, wouldn't you?

A. Oh, no, we have no item for any such thing as that. We would charge the rent of that equipment for the time when it was employed.

Q. But you have already testified that when you built the Northern Pacific road, the greater part of it, you owned the equipment which was used for the construction of it.

A. Well, I presume that it was owned by the Railway Company.

Q. And you have also testified that it was of the same character as that that you have included under the head of equipment in your estimate of the total value of the cost of the road in Minnesota, but that it had become—

Mr. HOW: Will you permit the witness to answer the question?

Mr. DURMENT: Will you permit me to finish my question first?

The MASTER: I think counsel was asking a question that perhaps was interrupting the witness.

The question was read and added to by Mr. Durment as follows:

—had become obsolete and was replaced by this new equipment.

A. Yes, sir, practically.

Q. Now, that same equipment that you had of that char-

acter, except the track-laying machine, could be used now if you owned it in laying this track, couldn't it?

A. Well, they wouldn't use it now because it is obsolete.

Q. But the other stuff the road does own—

A. Yes, sir.

Q. —which you have included in your valuation of the entire line—

A. Yes, sir.

Q. —could be used in doing this work?

A. Yes, sir, it could.

Q. And yet not only have you included the cost of that in making up your estimate of the value of the entire System in Minnesota, but in making up the cost per mile here of laying track and the like you have included a rental on that same machinery?

A. Yes, sir, certainly.

Q. This item here of Rent on Equipment, Train Service and Handling to the Front, $365.93, is only for laying track and surfacing?

A. That is all.

Q. You testified before that the cost of handling and ballast was included in this figure here, $1,967.20.

A. Yes, sir.

Q. Now, what portion of that $365.93 is for rent of equipment?

A. Well, I can't give you the details of it here. I would have to work it out for you.

Q. Can you tell us how much of the $365.93 is for handling the material?

A. No, sir, I would have to work that out. All those details would have to be worked out.

Q. Nor how much for handling any of the material?

A. No, sir.

Q. Now, what train service was needed for surfacing and

track-laying?

A. There always has to be an engine at the front, continuously, moving the outfit; there has to be power for hauling stuff out at the front; there has to be power in the yard for doing the necessary switching and unloading.

Q. That would be in the supply yards?

A. Yes, sir, in the material yards. Now, it would depend entirely on the distance to be hauled how many engines would have to be used in hauling.

Q. Do you mean to say that this item of $365.93 includes the engine used in the material yard?

A. Yes, sir.

Q. And the engine at the front and the engine for hauling material?

A. Whatever power they have for hauling material or men to and from the work.

Q. Now, isn't it true that, as a matter of fact, a large part of the material never is unloaded in the material yard at all?

A. No, sir.

Q. In track-laying and surfacing?

A. No, sir, it is a fact that a great big portion of it is.

Q. And a great big portion of it is not?

A. No, I say a very small proportion of it is not unloaded.

Q. There is some of it that isn't?

A. There is some of it that is not unloaded. If I can explain to you how they lay track you will perhaps see the reason for unloading. When they get ready to lay a mile of track, they have their pioneer car or track-laying machine at the front. Behind that is this steel and the ties, properly loaded on their cars, which are equipped for track-laying, and those cars are all equipped with rollers. They put the steel and ties on rollers and carry your two rear cars to the front. Now, you can understand that the cars that come in from foreign lines, or from their own line, are not equipped in that way, and

oftentimes we have to have our steel unloaded in order to curve it and pick out the short rails which are shipped, and for that reason nearly all that steel has to be unloaded.

Q. That is, figuring upon laying the track with a track-laying machine?

A. Yes, sir.

Q. Where you don't use a track-laying machine, how is it?

A. We don't have to do nearly as much unloading.

Q. You don't have to have nearly as much use for the material yard, do you?

A. No, sir. Well, yes, you would have to have as large material yards, and perhaps larger, in fact.

Q. Wouldn't you distribute your material along the line?

A. No, sir.

Q. Either one?

A. It doesn't make any difference which.

Q. Without putting into the material yard, very frequently?

A. You would distribute your ties by team along ahead of the track.

Q. Those that you bought adjacent to your line?

A. Yes, sir; or, if you laid without a machine; but that would mean if you were doing the grading it would cost a good deal of money to put the grade in shape.

Q. But you can't tell us how much of this $365.93 is for train service or how much for handling?

A. No, sir.

Q. What is the average number of miles or distance which can be laid in the course of a day with a track-laying machine?

A. Well, you can lay two to three miles a day

Q. With one track-laying machine?

A. If the conditions for track-laying are perfect, yes, sir.

Q. What is the average?

A. Oh, I should say the average is about a quarter of a mile.

Q. In a country like Minnesota?

A. Yes, sir.

Q. With a track-laying machine?

A. Yes, sir.

Q. Why?

A. Well, a piece of grade might not be completed; they build bridges ahead of the track, and the material might not be there; you might be laid up for equipment, power be in bad shape and have to go to the shops,—any quantity of things that might be.

Q. Yes, it might be that there might not be any road built at all, because they couldn't raise the money.

A. Yes, but that rarely, if ever, happens, while the items that I have enumerated happen every day.

Q. Well, assuming, in the first place, that your road-bed is graded and ready for the track to be laid; assuming, in the next place, that you have got your equipment on the line that you are charging for in this statement ready to do its work; assuming that you have got your track-laying machine there, which would be a part of the equipment, ready for work; and that the men you have included in this statement are ready for the work, so that there is nothing to interfere with your going on and doing the work in the ordinary laying of the track in Minnesota, what would be the average per day of track laid by a machine of that sort?

A. Well, a man would lay two or three miles a day with those conditions, if they could ever exist, but they never exist.

Q. Well, if they did, he could lay two or three miles a day?

A. Yes, sir.

Q. That is, if you got things in shape to do it with and had the stuff on hand in working order that you have charged for in this statement, they could lay two or three miles a day?

A. Yes, sir.

Q. And they could lay it for the same price, couldn't they, that you have got it included in this schedule?

A. Yes, sir, I think they could lay it a little cheaper.

Q. And if they could lay three miles a day, then it would be one-third of $365.93?

A. Rent of equipment?

Q. We will take the items. One-third of $392.15, that is the figure there.

A. I don't see where you got the one-third from.

Q. Well, that is the cost of track-laying and surfacing for one mile.

A. Yes, but it isn't laid in one day, though.

Q. No, I am assuming the conditions were as you have said when you said they could lay three miles a day with this same equipment.

A. No, in the first place that would be—the equipment has nothing to do with this laying of track. That is the labor.

Q. Well, I know, but that is for a day's work, isn't it? That is for the work of a mile?

A. Yes, sir, that is the work of a mile.

Q. And it won't cost any more to lay track all day with a machine when you lay three miles, if the conditions are right, than when you lay a mile, will it?

A. Oh, yes.

Q. Well, why?

A. Well, in the first place, if a man is going to lay three miles a day, he is organized for laying it. He might have 250 men. But if he is only going to lay half a mile a day, he may have 25 or 50 men.

Q. How many men did you say would be used in laying this track, in making up the estimate as you did here?

A. Well, we make our estimates from facts.

Q. Well, that doesn't answer my question. My question is how many men did you figure on being used in laying a mile of

track in making up your Ex. FF, page 1?

A. I can't tell you, because I wouldn't go at it that way to make out the estimate.

Q. Then you don't know how many?

A. I don't know how many that was figured on, no, sir.

Q. Then you say if a man was going to lay three miles of track a day, he would organize for that?

A. Yes, sir.

Q. He would have the proper number of men to do it?

A. Yes, sir.

Q. But would he do it with the same machine?

A. Yes, sir, he would do it with the same machine.

Q. And same equipment?

A. No, there would have to be a little difference in equipment.

Q. What difference in equipment?

A. You would have to haul a great deal more material to the front. That means you have got to have more power and more equipment on hand.

Q. But how much more?

A. Well, I couldn't tell you. We have that all worked out.

Q. Then it is a matter of fact, though, a man may take a track-laying machine and the same equipment that he uses for laying a half a mile of track, and by employing more men—a sufficient number of men—he can lay a mile of track with it a day, can't he?

A. I don't think I understand that question.

Q. Well, what I mean to say is, that if a man is going out to lay railroad track, in building a new road, where he has a track-laying machine, he has got to have a certain amount of equipment, hasn't he?

A. Yes, sir.

Q. And the amount of equipment which he would use for building or laying a half a mile a day he could use similar

equipment for laying a mile a day if he would put on sufficient men, couldn't he?

A. Oh, no, no. When a man organizes for laying a certain amount of track, he figures that each man requires so much room, so much for sleeping quarters, so much for dining quarters, and he has to provide for that amount; if he has got three times as many men he has to provide three times as much equipment for all those men.

Q. How much does he figure that he has to provide for each man, suppose he has a crew of twenty-five men?

A. Some of our cars will hold sixteen men, some will hold twenty men.

Q. Then you have got to have cars that will hold the men for sleeping quarters?

A. Yes, sir.

Q. You have got to have a dining car, I suppose?

A. Yes, sir.

Q. And you have got to have a kitchen?

A. Yes, sir, you have got to have office-cars and tool-cars and cars on the repair track.

Q. You have to have your tool-cars, your office-cars and your repair-car whether you are equipped to lay a half a mile or a mile, haven't you?

A. Well, yes, of course. The organization changes, after you have got a certain number of men you have got to have more office-cars and more tool-cars.

Q. Yes, but what is the limit of men you can work, with say one office-car and one tool-car?

A. I suppose 100 or 110 men, something like that.

Q. And in equipping and laying a mile of track a day, how many men would you use?

A. About that.

Q. About 100?

A. Yes, sir, about 110 men.

Q. Then you could, equipped with one of these track-laying machines, lay a mile of track per day, under reasonably favorable conditions, with an office-car, a tool-car and a repair-car, a kitchen and dining-car and eight sleeping-cars (eight cars to sleep in, that would be sixteen in each), and about three engines, couldn't you?

A. No, sir.

Q. Well, now, what else would you need?

A. To take care of 100 men you would need an office-car, a tool-car, about four dining-cars, two kitchen-cars and six to eight—about eight—sleeping cars.

Q. Then it would take about fifteen cars, wouldn't it, for your equipment, fifteen or sixteen cars?

A. And about ten per cent on the "rep-track;" that is about eighteen cars.

Q. And how many engines?

A. Well, it would depend on where your track was. If you had to start out with the engine at the front, an engine at the material yard, and an engine at the track, after you had got out about ten or twelve miles you would have to put another engine on; you would average four or five engines hauling at the front and four or five engines for track-laying.

Q. In laying a mile of track a day with a track-laying machine, how many carloads of steel would there be and how many carloads of ties?

A. I think about twelve carloads of ties and six or seven carloads of steel; from twelve to fourteen carloads of ties and six to seven carloads of steel.

Q. Those could all be pulled by one engine?

A. It would depend upon circumstances.

Q. Now, in laying a track through a level country, without any steep grades, with a track-laying machine, wouldn't they ordinarily start out in the morning with the train loaded for the day's work?

A. If all these conditions that you are supposing existed, yes, sir.

Q. And then one engine would do the whole work for that track-laying for that day?

A. Depend entirely.

Q. Of course, it would depend on the initial point of taking the material, but from the place where you start out to work in the morning?

A. You mean to haul the material out first?

Q. Yes.

A. They might get started, but the chances are it wouldn't get there; at least, that is our experience.

Q. Well, is there any reason why, as a rule, it doesn't get there?

A. Yes, sir.

Q. What is it?

A. Poor power and bad condition.

Q. That is because you haven't got the right kind of engines?

A. Yes, sir.

Q. If your engines were all right, though, you wouldn't have that difficulty, I suppose?

A. The difficulty would be reduced very materially.

Q. Then, have you included in here the rental for inadequate equipment, for poor engines, or for good engines?

A. The average, as we find them, in actual practice.

Q. Do you know what is the going contract price per mile for track-laying now, by contractors who use track-laying machines?

A. Yes, sir.

Q. What is it?

A. $300 a mile under certain specifications.

Q. Isn't it a fact that the contract on the Milwaukee road, which is being built out West now, is $275 a mile?

A. I don't think that they have a single contract that way. As a matter of fact, their tracks are all being laid by themselves, by their company forces.

Q. Have you known of any contracts for track-laying having been made on new track with a long line in the last two years?

A. Yes, sir.

Q. What ones?

A. The Portland and Seattle from Pasco to Vancouver, 220 miles, which has been completed.

Q. At what price per mile was that?

A. At $300 per mile for 2,880 ties. 3,000 ties were used, and we had to pay an additional price for it.

Q. How much additional?

A. Fourteen per cent.

Q. Fourteen per cent for that additional?

A. For that additional number of ties.

Q. How much would that make it?

A. $342. That is for simple track-laying. There is, in addition to that, $25 for every switch, and $75 a mile for tie-plates and extra work. Extra work consists in raising old grade and picking up wrecks.

Q. What do you include in your cost of laying track and surfacing here in $392.15 that would not be included in a contract let to lay track?

A. Well, that is practically on the same basis of what track-laying is costing us.

Q. That isn't the question. What do you include in this item of track-laying and surfacing, $392.15, that would not be included in a contract if you should let it to a man who would lay track with one of these track-laying machines?

A. Well, transportation of men.

Q. Well, you have put that in elsewhere, have you not?

A. I think not.

Q. You have got transportation of men included in there, have you?

A. Yes, sir.

Q. In that $392.15?

A. Yes, sir.

Q. What transportation of men would there be?

A. Well, you would have to get the track-layers out from St. Paul or from the labor market wherever it was.

Q. You mean the laborers?

A. Yes, sir.

Q. That is all, then, that is included in there that the other man wouldn't include?

A. Yes, sir.

Q. And what would you figure that would be?

A. About $25 a mile.

Q. $25 a mile?

A. To get the labor there.

Q. Just tell us how you arrive at the $25 a mile, will you?

A. Well, from experience, that is all.

Q. I know, but your experience must give you some knowledge from which you can explain it to the ordinary mind.

A. That $25 a mile is made up from the fact that there would be ten men hauled an average distance; in other words, there would be 2,500 miles' travel at a cent a mile.

Q. 2,500 miles at a cent a mile, in what way?

A. To a man.

Q. Where?

A. 2,500 miles for one man's travel.

Q. 25 men 100 miles?

A. Well, if there were ten men, it would be 250 miles; if there were 25 men, it would be 100 miles at one cent a mile.

Q. Supposing you were starting out to grade the Northern Pacific Railroad between Duluth and St. Paul and between St. Paul and Moorhead—now, that is your main line?

A. Yes, sir.

Q. —where would you bring your men from that you would have to pay a cent a mile to get them to the place of starting?

A. Well, the market generally, at certain times of the year, is at Duluth, St. Paul and Minneapolis; at other times, at Fargo but mostly at Minneapolis and Duluth.

Q. Well now, then, you wouldn't have to pay the fares of men for any great number of men, would you, in building those lines?

A. If the track-laying is done in the fall (which it usually is) we would get about ten per cent of the men that were shipped out.

Q. What do you mean by that?

A. If we shipped out a hundred men to lay track we would perhaps retain ten of them, and perhaps not any.

Q. That may be. And you would charge up against the cost of the road the transportation of the hundred?

A. Yes, sir, whatever it cost to get them out there.

Q. Though you didn't use them?

A. Although we didn't use them.

Q. Why wouldn't you use them?

A. Because they would probably get off somewhere else, to the harvest-fields or go West.

Q. Isn't it a fact that a great many of these men can be picked up along the line?

A. No, sir.

Q. Isn't it a fact, also, that you usually get your men through employment agencies who require them to put up their transportation before they send them out?

A. I don't know as to that. We don't require them to put up transportation.

Q. But, as a matter of fact, don't you know that a great number of those men who go out to that work are taken out through employment agencies?

A. Nearly all of them through employment agencies.

Q. And that they require the men to put up the cost for their transportation?

A. I don't believe such a thing exists. It would be a good thing if it did.

Q. Then you figure that if you send a hundred men out it would cost you a cent a mile to transport them?

A. Yes, sir. Well, I don't know what it cost, we simply assumed the figure one cent.

Q. Now, if you will turn to your Ex. 3 and take the detail under it, "Northern Pacific Railway Company Estimated Cost of Track-Laying per Mile," (page 19) you will find that there is no part of the transportation of those men included in your $392.15 for track-laying and surfacing.

A. I think there is. You mean this sheet that contains the estimate cost of $758 a mile?

Q. Yes, sir.

A. I think you will find that there are men transported. If you look at the bottom, under the head of Transportation, you will find that it averages "10 men 250 miles at 1 cent per mile, $25."

Q. Yes, $25, that is true, but if you will take the item just above that, your cost of labor in laying that mile of track, you will find it is $392.15.

A. Yes sir.

Q. Not including any transportation of men at all; just the figure you have given us here.

A. Well, that all may be. This item here, I understand, is simply the cost of laying a track mile; it has got nothing to do with what has been estimated as the cost of a mile of track in Minnesota. This is an estimate of what our track-laying is costing us now.

Q. Yes, but you have included, for the labor of track-laying, in this Ex. FF, page 1, the same amount to a cent, for a mile,

as you have included in your detail to Ex. 3 for the same thing, haven't you?

A. I don't think I quite understand. You mean this statement here?

Q. What I mean to say is this: On your Ex. FF, page 1, cost of laying track and surfacing, your charge of $392.15 a mile covers the labor and cost of laying a mile of track, doesn't it?

A. Yes, sir.

Q. And it is the same labor, includes the same items of charge or expense, as are included in the same item of $392.15 in your detail to Ex. 3, showing the estimated cost of track-laying per mile, isn't it?

A. I think you are correct in that.

Q. Then this $25 per mile for men is in addition to that?

A. Yes, sir; I think that item of transportation has been left out in this statement here. There is an item of $75 a mile that has been left out that belongs in this estimate of the average cost of one mile in Minnesota, Ex. FF—Darling. I am not ready to testify to that, but it looks very much as if it had been.

Q. Now, you have said that the contract price for the last year or two, for laying track with the track-layers was $300 per mile.

A. Yes, sir.

Q. That contract of $300 per mile covers the same labor as is included under the head of labor on this detail to Ex. 3 which totals $392.15, does it not?

A. No, sir.

Q. Well, now, what is there in that statement which would not be covered by the contract of a track-layer?

A. Well, there is Placing Tie Plates, $43.20; Switch Work, including temporary and permanent turnouts, $50. I think

that is all. The balance would be included under the contract here.

Q. The contractor would not place tie-plates in laying the track?

A. No, sir, not at $300 a mile.

Q. Nor the switch work?

A. No, sir.

Q. This detail to Ex. 3 (being page 19 of that exhibit, I think) is upon the basis of taking four days to lay a mile of track, isn't it?

A. Oh, no. No, it is the average of what track-laying has cost us the last few years.

Q. Well, that figures how much time for laying a mile of track?

A. Well, the estimate is not made in that way.

Q. Well, the time must have something to do with it?

A. Well, that probably could be worked out here from these items.

Q. How much time do you figure it takes to lay a mile of track, on the average, with 110 men?

A. Well, with 110 men, you ought to lay a mile a day. If you pay labor $3 a day, that would be $330 a mile.

Q. What do you usually pay them?

A. We pay track laborers all the way from $2.50 to $2.75. Track-spikers and things of that kind, get $2.75.

Q. I notice here you say with 110 men on this detail here page 19, Ex. 3; how many men do you figure are in use in that crew? I mean just for track-layers.

A. Well, I should have to work this out, and I should have to assume a certain price per day.

Q. Well, I suppose you did all that in making up your estimate?

A. Yes, sir, that was done.

Q. And I would like to know—

A. I can get those details for you.

Q. —I would like to know how many men you figure you would work as track-layers.

A. Well, I can get that for you, those details.

Q. This noon?

A. No, sir, not this noon; it probably would take two or three days to work it out.

Q. You haven't retained your figures on that?

A. Yes, sir, I think those details are there.

Q. Well, we shall want that, I think.

A. But this estimate, you know, covers all these detailed sheets that we have in the different districts.

Q. Well, upon this matter what I want is to know how much of a crew of track-layers—not the engine crew nor the train crew, but the number of men included in this $392.15 shown under the head of Labor on that exhibit, and the price per day.

A. Oh, I can get that for you.

Recess until 2 o'clock.

AFTERNOON SESSION.

Q. Now, getting back to your page 19 of Ex. 3, the labor cost in laying one mile of track in Minnesota, $392.15, which is the same amount, at least, as the item of cost of laying track and surfacing in Darling's Ex. FF page 1?

A. Yes, sir.

Q. I notice that in this detail of Ex. 3, showing the estimated cost of laying a mile of track in Minnesota, you have placed tie-plates at $43.20; that is what it would cost to place 5,760 tie-plates, per mile?

A. Yes, sir.

Q. But you testified this morning that that meant about 7½ tons of tie-plates per mile?

A. Yes, sir. It depends entirely on the weight of tie-plates;

a mile fully tie-plated may be 7½ tons or it may be 15 tons, or even 18 tons.

Q. This morning you said 7½ tons.

A. Well, that was the average number of tie-plates per mile on our line.

Q. Where you had tie-plates at all?

A. Yes, sir.

Q. But on your line, take the entire main line in Minnesota, your average, according to Ex. FF, page 1, is .59 of a ton per mile?

A. Yes sir.

Q. It would cost to lay .59 of a ton of tie-plates, figuring the same as you do on this Ex. 3 (page 19), about $3.50, wouldn't it?

A. Yes, about that. We have to pay $75 a mile, when we contract, for about 6,000 plates. That would give you the cost per plate—about a cent and a half a plate.

Q. Well, you have got it on this estimate three-fourths of a cent a plate, on Ex. 3.

A. Yes, sir. This estimate is low. You understand this is not the estimate that we used for Minnesota.

Q. No, I understand.

A. This is something I made up for you.

Q. I understand, very well, that you have swelled your Minnesota estimate very much over the entire line, and that is what I am trying to show now.

A. I don't think you understood what I said. I said that this is not the estimate that we used in Minnesota, it is an estimate that I made up at your request.

Q. Which?

A. This estimated cost of track-laying per mile. It is not made up at your request but it is used in connection with what you have requested me to make for you.

Q. Now, which do you refer to, Ex. FF or Ex. 3?

A. I mean the one I gave you this morning.

Q. That is not what I am talking about now; I am talking about your estimate of track-laying per mile in Minnesota—

A. Yes, sir.

Q. —which you produced as a part of your Ex. 3, as one of the details of it.

A. Yes, sir; and when I produced this I stated that this is the estimated cost of laying a mile of track, a mile of completed track, not the estimate that we have used as the cost of a Minnesota mile of track.

Q. But it is one of your details for your Minnesota estimate?

A. Yes, but it was submitted to show what the estimated cost of laying a mile of track is—

Q. In Minnesota?

A. Not track as it exists in Minnesota, but Minnesota track. There is a statement here showing what we have used in Minnesota in these details.

Q. Now, let us get this straight. If you turn to your Ex. 2—Darling,—and what I find on my exhibit is the second detail of the Northern Pacific Railway Company estimated cost of track material, track-laying and ballasting—you give us there, do you not, your estimate for track-laying on the entire System?

A. Yes, sir, for the track as it exists on the entire System.

Q. But that is exclusive of grading?

A. Entirely, yes, sir.

Q. And you give us there your main-line track-laying at $913.95, don't you?

A. No, cost of laying track, $375.50, plus one extra switch, $27.50.

Q. And then you have cost of laying track and the material-yard work therein, and all that, added?

A. Yes, sir.

Q. Making $913.95 total?

A. Yes, sir, I think that is so.

Q. So then it is true, is it not, that this detail to Ex. 3, headed "Estimated cost of track-laying per mile" (which I have said was page 19), is an estimated cost of laying a mile of track in Minnesota?

A. Well, yes, it is an estimated cost of laying a mile of track in Minnesota; not of Minnesota track but of track that we put down to-day.

Q. Well, I don't care, it is an estimate of laying a track mile in Minnesota?

A. Well, every mile costs different, depending on what kind of steel and what you use. Now, this estimate is based on our first-class track, 85-pounds steel with tie-plates, but that is not Minnesota track as an average.

Q. Oh, it is higher, is it? Minnesota track is better than that or poorer than that?

A. No, Minnesota track is a little poorer than that. If you will look on one of these pages you will find—

Q. Then this estimate here to Ex. 3 is an estimate of what it would cost on the average to reproduce in Minnesota, at the present time, a mile of first-class track?

A. Yes, sir.

Q. A little better track than you have got on the average on the Northern Pacific?

A. Yes, sir.

Q. Then if that is true, I suppose this—

A. I would like to qualify that, because you use the word "track-laying," because on that page (19 I think it is) you will find that track-laying, the labor of track-laying, is estimated at $392.15. Now, to this should be added the item of transportation of men, about $25, which was included in rental of equipment and train service instead of labor, as it should have been.

Q. Where was it so included?

A. In these items here, that statement that I gave you this morning. If you will add $392.15 and $365.93 together, you will find that it just totals the $758.08.

Q. Will you say that again and say it slow?

A. If you will add the cost of laying track, $392.15, and the renting of equipment and train service and handling to the front, $365.93, you will find that it just totals $758.08.

Q. Now, let us see if we can't get this staightened out. This Ex. 3 headed "Estimated cost of track-laying per mile," gives $392.15 as the labor in laying a mile of track in Minnesota?

A. Yes, but I say to that should be added—

Q. I don't care about the adding, that is what it gives here on your exhibit?

A. Yes, sir.

Q. And that, you say now, was intended to show the cost of the labor not of laying a mile of track such as you now have in Minnesota, but a mile of track of better grade?

A. Slightly, yes, sir.

Q. And then we turn to Ex. FF, page 1, and we find in that "Cost of laying track and surfacing, $392.15," which is the identical amount of the cost of labor on this Ex. 3.

A. Yes, sir.

Q. And this morning you said, when asked to show what that included, that it included, as I understood, just the same things as are under the head of the item Labor on Ex. 3.

A. This is on Ex. 3.

Q. Well, I know, but on Ex. FF, page 1, you said this morning the item "Cost of laying track and surfacing, $392.15," covered the same things as item "Labor, $392.15," on Ex. 3?

A. Yes, sir.

Q. Now, what I am calling attention to is this: In that $392.15 you have $43.20 for laying tie-plates?

A. Yes, sir.

Q. That is on the basis of a mile fully tie-plated?

A. It is figuring it at three-quarters of a cent apiece, yes.

Q. Well, that is your own figure, you put it in?

A. Yes, sir.

Q. But according to your Ex. FF, instead of having a mile fully tie-plated, on the average, it was only a very small portion of it tie-plated?

A. Yes, sir.

Q. Now, what portion of it?

A. Well, there is 28.6 miles total tie-plated in Minnesota.

Q. Well, you have put in here .59 of a ton for tie-plates to each mile in Ex. FF, page 1?

A. .59, yes, sir.

Q. How many tons would the 5,760 tie-plates per mile run?

A. You mean the Minnesota tie-plates?

Q. Yes. Those that you figure in here in Ex. 3, page 19.

A. Well, they would run about 8.6 tons.

Q. Now, then, what part of that would .59 of a ton be?

A. About 6 per cent.

Q. Then instead of having $43.20 in your estimate for a mile of Minnesota track, if you were going to reproduce the roads as you have them now as to tie-plates, you would only have six per cent of that in, wouldn't you?

A. In the first place, I want to say that this has not been introduced as the cost of a mile of main track in Minnesota.

Q. Well, I have not asked you that question. The question I ask you is this: that if in making up an estimate you figure 5,760 tie-plates in a mile, weighing 8.6 tons, and include $43.20 into that as the price of laying track for one mile, if you in fact have only .59 of a ton per mile, as you show in Ex. FF, page 1, you should include six per cent of $43.20, shouldn't you?

A. It depends upon what you are after, what result you want. If you want what you asked me for or what you asked me to obtain—a statement to compare with my System estimate,—then this is right; but if you want the cost of tie-plating

as actually done in Minnesota, then you use .59 of a ton per mile.

Q. And that will give you there instead of $43.20, six per cent of that, won't it?

A. Yes.

Q. Which would reduce that by a little over $40, wouldn't it?

A. This estimate should not be reduced at all.

Q. That six per cent of that would be $2.59?

A. I don't understand where you get your $43.20.

Q. You have placing tie-plates, 5,760, at three-fourths of a cent, $43.20; that is on your detail to Ex. 3, laying a mile of track in Minnesota.

A. I fail to find it.

Q. It is headed "Estimated cost of track-laying per mile." Now, taking that estimate or detail of Ex. 3, if, instead of having 5,760 tie-plates per mile, you had only .59 of a ton per mile, as shown on Ex. FF, that item of $43.20 would be $2.59, wouldn't it?

A. About that, yes, sir.

Mr. HOW: How many tie-plates are there in a ton?

WITNESS: It depends on what they weigh. They weigh from three to five and one-half pounds apiece.

Q. There are 5,760 of those there in 8.6 tons, according to your estimate. If we assumed in that cost the labor in the detail to Ex. 3, .59 of a ton tie-plates, as you have it in Ex. FF, page 1, that would reduce that total by $40.61, would it not?

A. Where I have got $26.15 estimated?

Q. No, where you have got $43.20 estimated.

A. That is on page 19, then?

Q. Yes, on page 19.

A. Yes, sir.

Q. Making it $351.54? Now, how long do you say it would take to build the Northern Pacific lines in Minnesota, com-

plete, if you start in new?

A. Well, of course, it depends upon the condition of everything at the time you started to build. If they were building in other places and work going on like there was two years ago, we couldn't do this work short of eight years.

Q. And it would take about how many years, you say?

A. It would take pretty close to eight years.

Q. Assuming that the conditions are such as you assumed them to be when you made your Ex. 2 and your Ex. 3, that is, as you assumed them to be when you made that exhibit?

A. Well, I assumed it would take about ten years to do that work.

Q. To do the entire line?

A. Yes, sir.

Q. Do you mean to say that it would take ten years to build the entire line, that is, at the rate of about 500 miles a year, you mean?

A. That is, for the entire System, yes, sir.

Mr. HOW: 800 miles? There are 8,000 miles of track.

Mr. DURMENT: Well, there seems to be a discrepancy; the main-line is something over 5,000, I believe he said.

WITNESS: Yes; and then the others are sidings and spurs.

Q. Do you mean to say it would take just as long to build the System in Minnesota as it does throughout the United States?

A. No, of course I figured on Minnesota work going ahead at the same time other work was going on.

Q. Well, suppose the other work wasn't going on and you just had to build the Minnesota, how long would it take to build it?

A. It depends on conditions. If the conditions were like they were two years ago, it would take eight or ten years to do it.

Q. Supposing the conditions as they are now.

A. Oh, you could do it in from four to six years.

Mr. HOW: You couldn't build it at all as the conditions are now?

WITNESS: Well, the conditions aren't so bad as they were two years ago.

Q. As a matter of fact, as things run, five years would be a fair estimate to build the lines in Minnesota, wouldn't it, under ordinary conditions?

A. I should rather put it at six years.

Q. Well, you said from four to six years; wouldn't five be a fair estimate?

A. No, sir, I don't think you could do it in five years. I wouldn't want to tackle it.

Q. You have never expressed the opinion that you could, or that that would be a fair length of time?

A. I might. I wouldn't say that I did not.

Q. And you won't say that five years would not be a fair length of time?

A. I should rather put it at six.

Q. Of course you would rather—

A. Yes, sir.

Q. —but we would rather have you put it at four, perhaps.

A. Well, I wouldn't be safe in doing the work. I would want to see the work done. It isn't so much in mileage as it is in the construction of terminals and buying property, putting in water stations—

Q. But still, as conditions now are, there is a great surplus of labor wanting employment, isn't there?

A. There is a surplus to-day.

Q. And with the money to build all these things you could get men to do the work?

A. I could do it; that is, we could build a part of it under present conditions; you couldn't let it all under present conditions. The conditions would change entirely if you started

in to build 800 miles of main track in Minnesota.

Q. How many miles of main track in Minnesota?

A. 628, I believe.

Q. It wouldn't be much of a trick to build 125 miles of main track in Minnesota in a year, would it?

A. It would be a pretty good trick to do it, yes, sir, to lay the track and ballast it and put in the necessary facilities. It wouldn't be much of a trick to lay 120 or 125 miles of main track.

Q. You don't mean to say it couldn't be done under present conditions easily, do you?

A. Yes, sir, it could be.

Mr. How: How many months in the year could you work in Minnesota, Mr. Darling?

WITNESS: From the first of April until the first of November.

Q. And there are portions of the work necessary to be done that could be done twelve months of the year?

A. Some of the facility work could be done.

Q. I notice on your Ex. FF, page 2, Average Cost of One Mile of Branch Lines and Sidetracks in Minnesota,—would there be any considerably greater cost laying a mile of branch line and sidetracks in Minnesota than in the other portions of the System?

A. The cost of laying and surfacing?

Q. No, I say in the average cost of one mile of branch lines and sidetracks in Minnesota, would there be any great difference between Minnesota and any other portions of the System on that?

A. Yes, sir, in the way they have been estimated.

Q. I don't care.

A. As a matter of fact, the way you state it, no.

Q. The way I state it there wouldn't be?

A. No, sir.

Q. Would there be any greater expense of laying and surfacing a mile of track, branch lines and sidetracks in Minnesota, than in other states?

A. It would depend entirely on what you mean by surfacing. Now, surfacing may be one of two things: in main line that has got to be ballasted you lay it and you do the necessary lining and surfacing, that costs one thing; if the track isn't going to be ballasted, you lay it and you surface it from the sides, that is another thing. The two things are entirely different; the cost is entirely different.

Q. What portion of your track of the main line is laid in one way and what portion in the other as to surfacing?

A. The main line is all ballasted; and it has a lighter price for surfacing and laying. The branch lines, lots of them, are surfaced from the sides and they carry a higher price for laying and surfacing.

Q. Is that so throughout the entire System?

A. No, sir, because in the System estimate that—

Q. That isn't the question I am asking you. Throughout the entire system of railways are the conditions generally the same as to surfacing branch lines and sidetracks?

A. No, sir, because a great many roads ballast all their branch lines, ballast all their sidetracks.

Q. In your System, I mean; I am talking about the Northern Pacific System now.

A. As it now is?

Q. As it now is, yes.

A. Yes, sir, I think there are some branches in Minnesota, the average branches in Minnesota would cost a little more than the average branches on the main line.

Q. How much more would they cost?

A. Oh, I couldn't tell you.

Q. Why would they cost more?

A. Because there is more track surfaced from the sides

Q. It costs more to surface from the side than it does to ballast?

A. No, sir; you asked me about the item of laying and surfacing track.

Q. Branch lines and sidetracks?

A. Yes, sir.

Q. In Minnesota and other portions of your System?

A. No, that item means the laying of the track, and, where it isn't ballasted, the surfacing of it from the sides, so that it can take care of the necessary transportation; but if it has to be ballasted, this side surfacing doesn't have to be done.

Q. But as I understand it, when you are not going to ballast it, you do surface it from the sides?

A. Yes, sir.

Q. Whether it is in Minnesota or whether it is out?

A. Yes, sir.

Q. How much of your branch lines anld sidetracks outside of Minnesota are ballasted?

A. I couldn't answer that question.

Q. Well, what proportion?

A. I couldn't even tell you that. I made an estimate that I thought was right for that.

Q. I am asking you now the proportion of your branch lines and sidings outside of Minnesota that are ballasted.

A. Oh, I should judge it was about half.

Q. And what proportion in Minnesota?

A. I couldn't tell you that.

Q. About the same amount, isn't it?

A. I couldn't say as to that.

Q. You couldn't say as to that?

A. No, sir.

Q. Then as a matter of fact, you don't know whether it would cost any more to lay and surface sidetracks and branch

lines in Minnesota than it would throughout the System at large?

A. As an average?

Q. As an average.

A. No, sir, I do not.

Q. You will notice here your Exhibit FF, page 2, gives the cost of laying and surfacing a mile of branch lines and sidetracks in Minnesota as $556.56; if you will turn to your Exhibit 2 and under the head of "Cost of one mile of branch line," the fifth detail, or the sixth page, as I have it (it is branch lines, sidings and spurs, as was testified when you put it in), you have there the cost of laying one mile of branch line, siding and spurs, $375.50, as against $556.56 in Exhibit FF, page 2.

A. No, sir.

Q. Wherein is the difference?

A. One carries surfacing and the other does not.

Q. Where in the cost of one mile of branch line per mile do you show or include your surfacing?

A. It is left out.

Q. It is left out why?

A. By error.

Q. By error?

A. Yes, sir.

Q. You said this morning, I believe, you couldn't tell us how much in laying main line was surfacing and how much track-laying; can you do it in the branch line over here on Exhibit FF, page 2?

A. What is the difference between labor of laying and the labor of surfacing?

Q. No, how much of your item $392.15 is for the cost of track-laying and how much for surfacing?

A. I have no such item here.

Q. On Exhibit FF, page 1.

A. You said page 2, mile branch lines and sidetracks.

Q. Well, on that you have given the cost of laying and surfacing track.

A. Yes, sir.

Q. $556.56?

A. Yes, sir.

Q. Can you tell how much of that is labor of laying track, and how much surfacing?

A. No, sir, I can't divide it here.

Q. Can you divide the cost of laying track and surfacing, $392.15, Exhibit FF, page 1? I think you said this morning you couldn't do that.

A. I don't think so without getting hold of the details of it.

Q. You can't give us, with any accurate idea, the amount per mile it would cost to surface a branch line and siding?

A. Well, it generally costs from $275 to $300 a mile.

Q. To surface?

A. Yes, sir.

Q. Then that being so, the track-laying on Exhibit FF would only cost about $192.15 a mile, wouldn't it?

A. No, sir, it don't mean that at all, because a great big portion of this mileage is ballasted.

Q. That doesn't make any difference. You say here cost of laying track and surfacing, $392.15?

A. Yes, sir, one mile may be ballasted—

Q. And you have said that the contract for laying the track alone would be $300?

A. Yes, sir.

Q. Then you have gone on and said there would be included a switch and some other things in there that made about $350 of that, which would leave you about $42.15 a mile for surfacing; and that is about what it would cost for surfacing, isn't it, $42.15?

A. It will cost you by contract, or to do it yourself, $250 a mile to surface track and sides.

Q. Well, what do you mean by that?

A. That is not this average branch line, sidings and spurs in Minnesota; if you were to build a branch line and surface it from the sides, it would cost you $250 a mile to side-surface it, but if you are going to ballast that, it doesn't cost you any such amount to surface it.

Q. I don't care whether you side-surface it or not. How do you usually surface your branch lines in Minnesota?

A. We have been surfacing from the sides a good deal.

Q. What proportion of it is from the sides?

A. I couldn't tell you what now; it is in details.

Q. How do you do your other surfacing,—in from the sides?

A. You simply line up the track and tamp dirt enough under there so you can run over it until you get your ballasting.

Q. That is not an expensive matter at all, is it?

A. No, sir.

Q. And a good deal of your branch lines and sidetracks in Minnesota are done in that way?

A. I don't know just what proportion; a good many of them are, yes, sir.

Q. Now, in this Ex. FF, and also on both pages FF-1 and FF-2, you have figured, apparently, that there was to be a ballasting of the track, both branch line track and main track. You have on Ex.FF, page 1, for ballast, $1,967.20, and on Ex. FF, page 2 ballast, $721.77. Why the difference in the cost of ballasting for branch lines and main lines?

A. One mile may be ballasted and the next mile may be surfaced; the average would be divided by two.

Q. That is true of both the main line and the other, isn't it?

A. No, sir, not to such an extent.

Q. Well, but there is a good deal of the main line that is not ballasted, isn't there, in Minnesota?

A. I don't think so.

Q. None of it?

A. I don't know of a foot of main line in Minnesota that has not been ballasted.

Q. Then this $721.77 is arrived at here by averaging the entire ballasting among the entire lines of branch roads and sidetracks, is that right?

A. You take the total cost of ballasting and divide it by the number of miles.

Q. That is the total cost of ballasting the branch lines and sidetracks?

A. Yes, sir.

Q. And divide it by the total miles of such tracks?

A. Yes, sir.

Q. And the fact is, as I understand it from your testimony, that there is a good part of the branch lines that is ballasted, but how much is ballasted and how much unballasted, you don't know?

A. I couldn't say without going to the details, no, sir.

Q. Now, just tell us, will you, how you get your cost of $1,967.20 for a mile of ballasting main track?

A. I would have go to the details for it.

Q. Well, I want to know how much of that is labor, how much of it is freight, what the length of haul is, the rate of freight and the cost of material; in other words, I want it so I can take every item and figure it myself and see whether you get the right result.

A. Yes, sir.

Q. And the same thing with reference to ballast, under Ex. FF, page 2.

RE-DIRECT-EXAMINATION.

By Mr. HOW:

Q. Mr. Darling, the figures with regard to some of the items on your Defts'. Ex. FF, page 1 and page 2, and on your page headed "Cost of one mile of main track," and your page headed

"Cost of one mile of branch lines, sidings and spurs," on Complainant's Ex. 2 do not agree. I call attention to this item, for instance, on page 1 of Ex. FF the cost of laying track and surfacing is set down at $392.15; on page 2 the cost of laying and surfacing track is set down at $556.56. On your Complainant's Ex. 2, on the page headed "Cost of one mile of main track" the contract cost of laying track is put down at $375.50, there being included there, apparently, no charge for surfacing; and on the page headed "Cost of one mile of branch lines, sidings and spurs," the cost of laying track is set down at $375.50, there being no charge included in that last for surfacing. Will you explain the difference in those figures for what in general, appear to be the same items?

A. Well, each one of them is an estimate for tracklaying and surfacing under different conditions.

Q. And how do conditions differ?

A. In the first estimate you refer to, the average cost of one mile of main track in Minnesota—

Q. Which is Ex. FF, page 1?

A. Yes, sir;—the cost of laying track and surfacing is $392.15. That is the average cost of laying and surfacing such as you have to do when ballasting is to be done for one mile of main track.

Q. Now, what is ballasting?

A. Ballasting is the placing of sand, gravel or cinders, or some material that is easily drained, under the ties and between the ties to make a suitable roadbed and a roadbed that is easily drained.

Q. And to protect the roadbed?

A. And to protect it from wash.

Q. What is surfacing?

A. Surfacing is the filling in between the ties and making such a section from the material on the side of the roadbed as will properly drain.

Q. Of whatever material happens to be there?

A. Yes, sir.

Q. Where do you get material for ballast?

A. From some ballast-pits, either on the right-of-way or some place that we purchase, some distance from the place where it is used.

Q. Do you sometimes have to make a long haul?

A. Yes, sir.

Q. How long in Minnesota, what is the length of haul that you can think of as a long haul in Minnesota for ballast?

A. I should judge an average is about sixty miles; that is a fair haul in Minnesota.

Q. An average haul is sixty miles for ballast?

A. Yes, sir.

Q. The surfacing, you say, you get on the premises, and is composed of the same material as makes the roadbed?

A. Yes, sir.

Q. It is in that, then, that the principal difference in the figures consists, the difference in conditions in that regard?

A. Not entirely. That goes on page 2, part of that. Part of that track is ballasted track and part of it is surfaced track.

Q. And you have taken what?

A. I have taken the average.

Q. $556.56 is the average of a track, whether ballasted or surfaced merely, or both?

A. Yes, sir.

Q. Suppose you start to lay fifty miles of main track in the state of Minnesota. You say that the steel averages 116.88 tons to the mile; fifty miles of that would require, in round numbers, 5,800 tons of steel. Supposing you ordered 5,800 tons of steel rolled and delivered for the purpose of laying that track, what is the custom of the trade with regard to delivery, when and how would it be delivered?

A. The steel is purchased for certain delivery and we have

to take the delivery as we agree to whether our grade is ready or not.

Q. Do you know whether the custom of the trade allows you to require the delivery of steel as you shall need it for laying upon that fifty miles of track?

A. No, not for such small quantities as that. We have to take that as we agree to.

Q. Come all together?

A. Yes, sir. For larger quantities, of course we could divide it a little.

Q. Now, when the steel is delivered, what, in actual practice, becomes of it, how is it handled by you?

A. If it is delivered at St. Paul, it may be carried through to destination on the car in which it is delivered; or, if it is in bad order, it has got to go somewhere and be transferred; or, if there is any trouble on the road, like we had two years ago last winter, it has got to be unloaded and held over until the business can be taken care of. If there is no accident on the road, it goes through to destination, and then we have to put it into a material yard, unload it and take care of it until such time as we can lay it, and pay demurrage on the cars.

Q. And when you get ready to lay it, you have to load it again and take it out where it is laid?

A. Yes, sir.

Q. Constantly increasing the distance, of course, of carriage from the material yard?

A. Yes, sir.

Q. Do you know whether the custom of the trade would permit of your obtaining delivery of steel at a sufficient rate to lay one mile of track per day, for instance?

A. Why you could so handle your delivery of steel and track-laying that you could get material enough to lay that.

Q. Yes, but I mean whether or not you could—

A. You couldn't depend on any such delivery.

Q. Have you ever known of any such delivery being made?

A. Oh, no, you couldn't depend upon it.

Q. I understand that you have made your Defts'. Ex. FF and the figures in it from your actual experience within the last three or four years.

A. Yes, sir.

Q. How many miles of track have you constructed during that period, to serve as a guide for these estimates?

A. 450 miles.

Q. And did you use those 450 miles and the cost as the basis for making these figures?

A. Yes, sir.

Q. Where were those 450 miles of road constructed?

A. Thirty-four miles on the Minnesota & International extension; about eighty miles from Wadena west, in Minnesota; about thirty miles west of Fargo; ten miles at Valley City; thirty miles Missoula to Garrison; thirty-seven miles from Livingston to Bozeman; thirty miles in what was known as the Cabinet Hill change of line; 220 miles between Kennewick and Vanconver. I think that is all that were used in the figures; we laid a little more track than that.

Q. What is that total, how many miles?

A. 471 miles.

Q. Now, excepting so far as the cost of transportation of material, and so forth, is concerned, how have conditions with regard to the construction of track in those different localities compared with conditions in Minnesota?

A. Well, they are practically the same except transportation is a little more.

Q. Other conditions you think are a fair—

A. They would average up. We pay in the West a little more than you have to pay here for track, but the item of transportation figures up pretty high here, we get so very few men as compared with the total shipped. We can get lots of men in

the West, we get fifty to sixty per cent of the men shipped West now, and for three months in Minnesota we only got from eight to ten per cent.

Q. How, in your judgment, do the conditions as a whole, compare in those instances that you took for the purpose of making this estimate, with conditions in Minnesota?

A. Well, they are fair.

Q. As I understand you, this Ex. FF is made upon the basis of your actual experience?

A. Yes, sir.

Q. And the actual cost. Now, based upon your actual experience and the actual cost in the last three or four years, the period which covers that construction, state whether or not this Ex. FF is reasonable.

A. Yes, sir, it is; it is low.

Q. Do you keep advised, in your profession and in your business, with regard to the cost to other railroads of construction work of a like character to that which you are called upon to do?

A. Yes, sir, we try to.

Q. For purposes of comparison with your own?

A. Yes, sir.

Q. To see if you are doing what you ought to do?

A. Yes, sir.

Q. Have you kept so advised for the last three or four or five years?

A. Yes, sir, as much as we could.

Q. State whether or not, when compared with the cost to other railway companies similarly situated of track construction, within the last three or four or five years, your estimate as contained in your Ex. FF, pages 1 and 2, is reasonable.

Mr. DURMENT: We object to that upon the ground that the witness has not shown himself competent to testify, and that it is not a matter of opinion but it should be a matter of com-

parison; they should produce the men that did the work and the actual figures on the other roads.

The MASTER: Objection noted. He may answer.

A. Why our prices are higher than some, lower than some.

Q. But in general, by comparison?

A. In general they are fair; but I would like to explain why ours are higher than some.

Q. I would like to have you.

A. These estimates are based on our average manner of track-laying. The St. Paul Company have laid a lot of track in the last two years, and they have undoubtedly laid it cheaper than what we have estimated. I don't know that they have, but I haven't any doubt but what they have, for this reason, they have hauled their material 75, 100 or 150 miles ahead for the bridges and gotten the bridges out of the way and the grading out of the way and everything all out of the way, at a large expense, and pushed their tracks through. By that method you can lay from two to three miles of track a day; whereas, in this manner of track-laying you might be able to lay a half a mile and come up to a bridge where we would have to stop and drive the bridge, get it in shape to get over it. These track-layers would go back to the back work, like putting in ties and back-spiking and putting in switches and things of that kind; but we figure that the total cost is cheaper although the track-laying would be higher, but we had not included in our estimate something which we would have to put into grading and into bridging to cover these extra hauls and getting ready for the track to lay a large amount of track a day.

Q. In case you prepared the bridges and the grades thoroughly before the track-laying began?

A. Yes, sir.

Q. And you have estimated your grading on the basis that you were not going to keep away ahead of the track-laying?

A. Yes, sir.

Q. And your judgment is that the total cost of track construction is less—

A. Yes, sir.

Q. —when so handled?

A. Yes, sir.

Q. In your estimates, I understand that before work is authorized and you are instructed to undertake it, you prepare and submit estimates of its cost, habitually?

A. Yes, sir.

Q. In those estimates, what cost of constructing main track do you use? At least, how does it compare with that under like conditions in your Ex. FF, page 1?

A. Well, we practically use these prices or very close to these prices. We don't go into detail so much, but I think we average, for branch lines and such things as that, about $1,000 a mile where we have to surface, and $750 to $800 a mile where we just simply lay track.

Q. And what has your experience been with regard to whether or not you overrun or come under your estimates?

A. Well, we overrun a good deal.

Q. That has been your habitual experience?

A. It has been, for three years, 25 and 35 per cent.

RE-CROSS EXAMINATION.

By Mr. DURMENT:

Q. Is it cheaper or more expensive to lay tracks on a 10, 20, 25 or 37-mile line than it would be to lay it upon a 150 or a 200 or 250-mile track?

A. Under the same conditions it is cheaper to lay on a 100 or 150-mile stretch, of course.

Q. And, ordinarily, if you are building a road new from the beginning, under the same conditions, so far as they can be the same, the cost per mile of laying the road would be less than where you have to lay a 10-mile here and a 30-mile there

and a 25-mile branch from another part of the main line, wouldn't it?

A. Yes, sir.

Q. And now, as I understand you on your re-direct examination, Ex. FF, (pages 1 and 2,) was not intended by you to give the average cost of a mile of track in Minnesota of the kind that you now have in the Northern Pacific System?

A. That was not the estimate used, no, sir.

Q. But these were the estimates for what would be practically a perfect road?

A. Yes, sir. But I would like to say, however, that those estimates, added together, make the total of what we have in Minnesota. But they were made in that way, as I understood, at your request; you wanted certain things and I tried to make it up in that way.

Q. Well, it is a long while since I made the request, but my recollection is that I requested what would be the average cost of laying a mile of main track and an average cost of laying a mile of branch track and sidings in Minnesota of the character of the main track and the branch track that you now have in your present road.

A. Well, I understood it much like that, except it was to be compared with the main line on the system, item by item.

Q. Well, we know what you have intended here, at any rate.

A. Yes, sir.

Q. So it may not make much difference. Now, you say, as I understand it, that in your Ex. 2, under the head of "Cost of one mile of branch line, sidings and spurs" there is nothing included for surfacing?

A. No, sir.

Q. Because the track is ballasted?

A. That is not the reason I gave.

Q. Well, I understood that was the reason; you say that you don't ordinarily include it.

A. I think I testified that the reason that that was left out was through an error.

Q. Well, then, assume that was so, you did say that where you ballasted your track, or were going to ballast it, there was no extra charge for surfacing to speak of?

A. There was a slight amount, not very much.

Q. And that the difference, practically, between your estimate for branch and siding in Minnesota and your branch and siding on the main line was due to the fact that there was a good deal of surfacing in Minnesota because it was not ballasted?

A. Some of it is not ballasted.

Q. Now, I notice here in your Ex. FF, page 2, that you have got a charge of $721.77 for ballasting, on that sample mile of road.

A. Yes, sir.

Q. And that in your estimate in Ex. 2 for the cost of a mile of branch line siding and spurs, as divided between the entire System including Minnesota, you have got a charge of nearly $990 a mile for ballasting.

A. Yes, sir.

Q. So, as a matter of fact, if you take your estimate of the entire System and on the branch lines, there is not a great deal more of it ballasted than there is in Minnesota, proportionally, is there?

A. I couldn't say as to that now, but in that System estimate we estimated that there was half of the branch lines ballasted and half unballasted; that is about what it was, about what it was figured to be.

Q. And that same thing is about true in Minnesota as it is outside?

A. Perhaps. I don't know that it is, but we have the details of that ballasting, and so we know just what is ballasted.

Q. Then if that is true, it is about a half in Minnesota

ballasted and a half not, a half in the whole System and a half not; then this surfacing that you speak of, and upon the basis on which you attempt to account for the difference between $375.50 and $556.56, would not account for it, would it?

A. It makes $164 difference.

Q. I don't know how much, I haven't figured it.

A. Well, that is the way it was obtained; we took the actual number of miles of ballasted track in Minnesota and the actual number of miles of unballasted track, and then took our cost of track-laying and track-surfacing, where it is surfaced from the sides, and proportioned it.

Q. And didn't you also use higher prices in making your estimates for labor and material and for transportation of same, and that sort of thing, than you did for the System at large?

A. No, sir, less except the transportation.

Q. That is, you used less prices for your ballast?

A. I think we did. We used six cents less a yard for ballast.

Q. You put it at what?

A. Sixty cents.

Q. Then if you used less per yard for ballasting in Minnesota than you did outside, your total of $721.77 would figure pretty nearly as much ballasted road, or more, than you would have in your mile of branch lines, wouldn't it?

A. Well, I don't know what you are trying to get at.

Q. Well, here is what I am trying to get at. You have figured here the average of the System at 66 cents—

A. Yes, sir.

Q. —1,500 cubic yards of ballasting, on the average, per mile for the entire System. Now, if you take $721.77 at 60 cents a cubic yard how many yards will that give you per mile of ballasting in Minnesota?

A. It would be 1,200 and something.

Q. So then, after all, there is comparatively little difference

in the proportion of branch lines in Minnesota ballasted and the proportion of the entire System ballasted?

A. This figures 1,200, and the System 1,500.

Q. Yes, but you figured the System at six cents higher a cubic yard?

A. Yes, sir, and about 300 yards more.

Q. So that, I say that, taking the entire System, which includes Minnesota, and averaging it, you say there are 1,500 cubic yards to the mile—

A. Yes, sir.

Q. —taking the entire Minnesota system and averaging it alone, in branch lines you have got about 1,200 cubic yards to the mile?

A. Yes, sir.

Q. So that there is not any very great difference?

A. Well, three is a twenty per cent difference, that is all, in the number of yards per mile.

Q. And do you mean that that would make the difference between $375 and $556 in surfacing?

A. What is the $375, please?

Q. Well, that is the cost of the track-laying on a mile of branch lines and sidings for the System.

Mr. How: $375.50 is the cost of laying track.

WITNESS: I don't know what the $375, contract price of track-laying, has to do with the $721 for ballasting.

Q. Well, maybe I can make it clear. To make your estimate of the cost of one mile of branch lines you make $375.50 the cost of track-laying?

A. On what?

Q. $375.50 the cost of track-laying on the System.

A. For branch lines?

Q. Yes.

A. Yes, sir.

Q. Now, in Minnesota, for the same thing you make it $556.56?

A. Yes, sir.

Mr. HOW: For the cost of laying and surfacing.

Mr. DURMENT: The cost of laying and surfacing.

WITNESS: Yes, sir. Surfacing is left out of this branch line here.

Q. That is a difference of $181.06 a mile?

A. It figures that way, yes, sir.

Q. So that that, I should say, fairly would be the cost of surfacing a mile of Minnesota track, over and above the cost of laying a mile of the branch line for the System?

A. That is the average cost of Minnesota surfacing, about $180, $181, something like that.

Q. That extra cost of surfacing, I understand you to say, is the only way you accounted for the difference in the amount?

A. Yes, sir, that is the way.

Q. In the one mile of branch lines on the System you have 1,500 cubic yards of ballasting, I mean on the branch lines?

A. Yes, sir.

Q. On the branch lines in Minnesota you have 1,200 cubic yards of surfacing?

A. Of ballasting.

Q. A difference of 300 yards. In other words, there is about one-fifth of a mile more unballasted track in the Minnesota estimate than in the System branch lines?

A. You are figuring entirely from yards, as I understand it. The ballast per mile in Minnesota might vary very much more than 1,500 yards to the mile.

Q. Why? due to the difference in depth?

A. Due entirely to depth.

Q. What is the average depth on branch lines—six inches, isn't it?

A. Six to eight.

Q. And do you know whether it is greater or less in Minnesota than it is in the West in depth?

A. Well, I don't know; I should think probably it is. It is not very far from the same but it may be a little more in Minnesota.

Q. And it may be a little less?

A. Possibly.

Q. So it is fair to estimate it is about the same on an average?

A. I don't acknowledge that, because I don't know.

Q. Well, assuming that it is, then you have got about one-fifth of a mile to surface under your Minnesota estimate for a mile that you would not have in the other?

A. You have got beyond me.

Q. Here is what I am driving at. On your two estimates here, Ex. 2 and Ex. FF, page 2, and upon your statement that you have charged 60 cents per cubic yard for ballasting in Minnesota, you have got in your Ex. FF, page 2, an estimate of $181 for surfacing one-fifth of a mile of track. Now, that is what it works out. And you say—

A. If it works out that way it is wrong.

Q. I know it is wrong, but that is what your totals work out, and you said it cost from $225 to $250 a mile to surface an entire mile.

A. Yes, it costs about $250 a mile, from $250 to $275.

Q. And you have in your estimate, according to your own tables, $131 a mile for surfacing that does not belong there, on your own figures?

A. I don't acknowledge any such thing. My testimony is based entirely on assumptions made by you. I would like to work these details out for you and show just how they are estimated.

Q. We have called for those; you can bring them in later?

A. Yes, sir.

By Mr. How:

Q. What is meant by "rent of equipment?"

A. In order to get equipment to carry on construction work we have to borrow it somewhere or hire it.

Mr. DURMENT: Provided you don't own it?

WITNESS: Oh, no, we might own it and not be able to get it. We own it this year, and we are not able to get it, we have to go outside and get it. We have to get that equipment somewhere, and in order to get it we have to pay a rent for it, whether we get it from the Northern Pacific or the Great Northern or some other railroad, and our rental charges are based on the cost of equipment, plus the shop charges, to which we have to add our own ordinary charges for repairs and renewals.

Q. It is merely a method of charging into the construction department what the operating department loses by parting with the equipment, I take it?

A. Yes, sir.

Mr. DURMENT: But if you are building a new road, the operating department would not lose anything by it, would it?

WITNESS: No, but we would have to pay interest on the investment, and we would have to pay for repairs, the shop repairs and anything of that kind, and, after we are through with them, for putting them in the same condition as when we got them.

Mr. DURMENT: But that would mean that this investment, then, would have to cover over the whole period of construction?

WITNESS: Not half of it.

Q. Well, that portion of it?

A. Yes. Our interest charges are simply for half of it.

By Mr. O'BRIEN:

Q. I want to ask you this: Taking into consideration the change in circumstances, the improved methods of construc-

tion, the difference of prices, all of the elements that go to increase cost, and all of the elements that go to decrease cost, could not the Northern Pacific railroad be constructed to-day as cheaply as it was originally constructed?

A. No, sir; for the reason that the price of material and the price of labor is very much higher. There has been no new equipment, no new methods of doing work, it is such kind of work as was originally done, no new kinds of plants; we would have to use exactly the same kind of plants they used at that time, the old wheel-scraper and the old track-scraper. The equipment we have now is for doing an entirely different class of work from what the Northern Pacific has got.

Q. I am not speaking of your equipment or anything of that sort.

A. I mean improved methods of doing work.

Q. There have been improved methods that have gone on just as well as increased cost of material?

A. Yes, sir, and those improved methods have been for the purpose of handling a different class of work.

Q. Isn't it true that, in the United States to-day, it costs more per mile to construct a road than it did ten years ago?

A. Yes, sir.

Mr. DURMENT: How about twenty years ago?

WITNESS: Even twenty years.

Q. Did it cost more ten years ago than it did twenty years ago?

A. No, I don't think it did, because the price of material hadn't begun to go up then.

Q. But, aside from the question of the price of material, the cost of construction is about the same, isn't it?

A. No, labor is more.

Q. Could you say, from your experience, what per cent of increase there is?

A. That would be a pretty hard question to answer. I

could say with a good deal of it it is a good deal more than double; ties, for instance, timber,—everything that goes to make up structures; labor is a great deal higher—we only used to pay $1.75, but two years ago we paid $3 and $3.50 for common labor. Of course it didn't average that, but they averaged $2.75 for common labor two years ago. And we paid $15 for lumber on the coast where we used to get it for $6; we pay 47 cents for ties where we used to get them for 23 cents. Steel is not more expensive, I don't think steel is quite as much as it was fifteen years ago.

Q. It cuts a great deal more figure in the construction, doesn't it?

A. It cuts a good deal of a figure, yes, sir.

Q. I say it cuts a good deal more of a figure in construction than twenty years ago?

A. Yes, sir, there is much more steel used.

Q. But you think, in general, there has been an increase?

A. Yes, sir, a very material increase.

Q. But you couldn't estimate how much?

A. I wouldn't want to do so, off-hand, no, sir.

By Mr. DURMENT:

Q. You have said that you made up your Ex. FF, pages 1 and 2, upon the basis of what you had paid for construction work in the last three or four years?

A. Yes, sir.

Q. As a matter of fact, the cost of constructing railroads during the period in which you have constructed these roads you have spoken of in the last three or four years, was very materially greater than it had been at any time in ten or fifteen years before, wasn't it?

A. Yes, sir.

Q. Do you know how much?

A. No, sir, I couldn't tell you.

Mr. DURMENT: We want to offer in evidence, as a part of

the cross-examination, Defts.' Ex. FF, pages 1 and 2.

An adjournment was here taken until Wednesday morning, September 23rd.

FEDERAL BUILDING, St. Paul, Minn., Wednesday, September 23, 1908. The hearing was resumed at 10 o'clock A. M.

JOHN B. DARLING,

recalled for further cross-examination, testified:

By Mr. O'BRIEN:

Q. Mr. Darling, you were to produce certain details.

A. Here is a sheet showing the rates used on ties and lumber. (Marked for identification "Defendants' Exhibit II—Darling.") This sheet shows the rates on steel rails and fastenings. (Marked for identification "Defendants' Exhibit JJ—Darling.") This sheet shows details of ballast. (Marked for identification "Defendants' Exhibit KK—Darling.") This sheet shows the details of track-laying and surfacing. (Marked for identification "Defendants' Exhibit LL—Darling.")

Q. Mr. Darling, in making the different estimates which you have made, showing the cost of a mile of track in Minnesota have you estimated a certain amount of labor in each case?

A. Yes, sir. Well, yes, the labor can be estimated either by the day or by contract.

Q. Which have you done?

A. In the items of Ballast we have a portion of it figured at the contract price which we ordinarily pay for loading the material, unloading it and tamping it and tamping it under the ties.

Q. You are now referring to the details of Defendants' Exhibit KK?

A. Details of ballast, yes. Now, the item of Shovels, pit-

tracks, sidings and repairs, is entirely labor outside of the contract. That amounts to three cents a yard.

Q. Will you please state how you estimated that item?

A. That item is estimated entirely from our experience in what these things cost. Now, we figure a shovel cost us about $10.50 to $12 per day, for rent. We furnish that to the contractor.

Q. (By Mr. How): You mean a steam-shovel?

WITNESS: I mean a steam-shovel. We haul the material for the necessary pit-tracks; we lay down the pit-tracks; we lay down all the sidings necessary to take care of the transportation of that ballast; we take care of the repairs of all cars and the shovel; and after the work is done we take up the tracks, distribute the material and haul it back to where it belongs or where it was taken from. Now, that is covered by the item three cents per cubic yard.

Q. Well, you must have some detail basis or bases upon which you arrive at that result of three cents per cubic yard?

A. I haven't the details of that here; I could get the details for you.

Q. Including the unit prices for labor?

A. Yes, sir. We would have to go back to our old vouchers and take the bills we have used for that kind of work; that would show the different classes of labor and the price for labor.

Mr. HOW: You are willing to disclose your vouchers and accounts to them—?

WITNESS: Oh, yes, sir.

Mr. HOW: —or to any representative that they want to put at the work?

WITNESS: Yes, sir.

Q. Now, there are many items in these exhibits and details, which you have furnished within the last two days, which include labor, are there not?

A. Yes, sir.

Q. And in which you have taken the same unit price for the different classes of labor?

A. Yes, sir.

Q. Now, will you be good enough to just list those prices and send that to us?

A. You mean get up the details that go to make up—?

Q. No, if you will send a statement listing the different classes of persons furnishing labor on the work, and the price for each class per day, it will be entirely satisfactory.

A. Yes, sir, I will do that.

Q. You have ascertained those prices, you say, from your old statements?

A. Yes, sir.

Q. And are they the prices that are prevalent now?

A. They are the prices that have been prevalent for the last three years.

Q. You have arrived at what you consider an average price for the last three years?

A. Yes, sir.

Q. Will you mail the details just agreed upon, within the next few days, Mr. Darling?

A. Yes, sir.

Mr. HOW: Mr. Darling will, within reasonable limits, furnish any details with regard to any of these statements upon request of Mr. Morgan, the engineer for the State Commission, whether or not it is demanded in court. I am a little uncertain as to whether or not I am consenting to too much work upon his department, but as long as he doesn't complain I don't think that I ought to. It has required a great deal of work, and will require more, apparently.

Mr. O'BRIEN: That is very nice. Mr. Morgan, then, can feel at liberty, in making his comparisons between his estimates and Mr. Darling's, to call upon Mr. Darling or his department for

any of the bases used by them in arriving at their conclusions?

Mr. How: He may have any information which the department has in its possession, for the purpose of comparison or any other purpose.

RE-DIRECT EXAMINATION.

By Mr. How:

Q. Mr. Darling, I think perhaps it has not yet been clear just how Defendants' Exhibit FF, the average cost of one mile of main track in Minnesota and the average cost of one mile of branch lines and sidetracks in Minnesota, was constituted and what it is intended to represent.

A. That is made up from the totals returned to the Minnesota Commission, or in this schedule, rather, Complainant's Exhibit 2, for Minnesota, in which is shown the total cost of doing that particular work. Then, at Mr. Durment's request, I distributed to different items that same total. Now, these items are shown in this Exhibit FF.

Q. Now, I ask you whether or not these figures $9,213.66, the total of the first page, and $7,035.75, the total of the second page, are claimed by you to represent the actual cost of any single mile of main line or branch line, as the case may be, in the state of Minnesota.

A. No, sir.

Q. The actual cost to construct it to-day?

A. No, sir.

Q. Am I right about this: That, with regard to rails, the Company has some miles of 62-pound rails, some of 72-pound rails, and some of 85-pound rails? 62-pound rails make how many tons to the mile?

A. Well, we have no 62-pound rails; we have 66-pound rails.

Q. 66, then; 66-pound rails make how many tons to the mile?

A. I don't remember; but something like 100 tons per mile.

Q. And 72-pound rails?

A. About 112 or 113 tons to the mile.

Q. And 85—?

A. 134 tons.

Q. Now, you multiply the number of tons in a mile of 66-pound rails by the number of miles in Minnesota having 66-pound rails, and you multiply the number of tons in a mile of 72-pound rails by the number of miles in Minnesota having 72-pound rails, and you multiply the number of tons in a mile having 85-pound rails by the number of miles in Minnesota having 85-pound rails; the aggregate of the three sums reached by those respective multiplications you divide by the number of miles in Minnesota, and the quotient is 116.88 tons?

A. Well, that was practically the method we pursued, except instead of being three different classes of rails there were probably several different classes.

Q. Exactly. I simply wanted to illustrate the method that you employed.

A. Yes, sir.

Q. And $29.75 is the cost per ton?

A. That is the cost used.

Q. Yes; and that cost is based on what?

A. It is based on the cost of rails laid down at Duluth or St. Paul.

Q. According to your actual experience in your transactions?

A. No, sir, it is a little lower.

Q. A little lower?

A. Yes, sir, a little low. It carries no item for inspection or unloading.

Q. And why did you put it low?

A. Well, that was the item that was used, and I didn't care to change it because there was only a little difference; there is not to exceed 25 cents a ton difference.

Q. But that is not greater than the amount which you have paid on the average during the last three years?

A. No, sir.

Q. Now, you pursued the same course with regard to angle-bars?

A. Yes, sir.

Q. And 6.8 net tons is merely the average for each mile in Minnesota for angle-bars?

A. Yes, sir.

Q. And the same with bolts?

A. Yes, sir.

Q. And the same with spikes?

A. Yes, sir.

Q. And the same with tie-plates?

A. Yes, sir.

Q. You do not, for instance, claim that any mile in Minnesota necessarily has .59 of a net ton of tie-plates?

A. No, sir.

Q. And the same with regard to the cost of laying track and surfacing, and rent of equipment, cross-ties, ballast and transportation, those are all, I take it, averages based upon the actual figures which you have paid in the last three or four years (the definite time perhaps, is not important) for work of this character?

A. Yes, sir.

Q. For work of this character?

A. Yes, sir.

Q. For each respective item?

A. Yes, sir.

Q. Now, you have .59 of a ton of tie-plates for an average mile. In your Exhibit 2, the detail with regard to the estimated cost of laying a mile of track in Minnesota, (I think we called it page 19 heretofore) and under the heading Labor, you have an item placing tie-plates, 5,760 at three-quarters of a cent,

$43.20. Are there 5,760 tie-plates in .59 of a ton?

A. No, sir.

Q. There are not, then, 5,760 tie-plates on an average mile in Minnesota?

A. No, sir.

Q. How many tie-plates are there on an average mile in Minnesota? If you can't state, perhaps—

A. I can't state.

Q. —perhaps you can approximate how many there are.

A. I could approximate, in this way, that I have worked it out so as to show that if these tie-plates were placed continuously there would be 28 miles of main track tie-plated. Now, if you divide 28 miles by the number of miles in Minnesota you get at the proportionate number of tie-plates per mile.

Q. You multiply 28 miles by 5,760, which gives you the total number of tie-plates used; you have 5,760 a mile here.

A. I don't quite understand that question.

Q. You have 5,760 to a mile, on page 19.

A. Yes, sir.

Q. Now, you have 28 miles fully tie-plated?

A. Yes, sir.

Q. Have 5,760 to fully tie-plate one mile, then if you multiply 5,760 by 28, it gives you the total number of tie-plates upon the System in Minnesota?

A. Yes, sir, approximately. I have the details of that, just the number; not here, but I can furnish them.

Q. Therefore you would correct the item with regard to tie-plates in your Exhibit FF?

A. Yes, sir.

Q. By a reduction of somewhere near $40?

A. Something like that. Not by $40 but by a proportionate part of $26.15.

Q. The item in Exhibit FF, "Tie-plates, St. Paul or Duluth, .59 net tons at $44.32," covers only the cost of tie-plates and

not the cost of laying them?

A. No, sir.

Q. That cost of laying them comes into the item "Cost of Laying Track and Surfacing, $392.15," I take it?

A. Yes, sir.

Q. So that the reduction that you desire to make in your Exhibit FF, through having included more cost of laying tie-plates than the present condition of the road in Minnesota justifies, would be the reduction in the cost of laying tie-plates ¾ of a cent apiece, and would come out of the item Cost of Laying Track and Surfacing, $392.15?

A. Yes, sir.

Q. Now, 5,760 tie-plates weigh how much, what is the tonnage?

A. Well, they vary from three to five and a half pounds, it depends on what kind of plates you use. These are light plates in Minnesota.

Q. Well, call it three pounds, that is how much?

A. That is eight and a half tons per mile.

Q. I am getting lost in a maze of figures; I wanted to find out approximately how much to reduce this Exhibit FF, but I think it is in the neighborhood of $40, still; that is a rough calculation.

A. It is not very far from $40.

Q. You don't know how that error occurred?

A. The error occurred in working this matter backwards and getting the information that Mr. Durment wanted. That is a clerical error by using the actual cost to us of track laid in Minnesota for the last three years instead of taking the estimated cost of laying a mile of track which we had previously used, which was $750 as compared with $758, which we have now used.

Q. What is your present custom, if you have any, with regard to the use of tie-plates in Minnesota?

A. Well, we are tie-plating everything on the main line.

Q. You fully tie-plate each mile now that you construct?

A. Yes, sir. I would like to modify that by saying unless we use very heavy ties, like oak ties. Sometimes we are not able to get the tie-plates and then we have to put in very heavy ties and get along without the tie-plates until we can get them.

Q. But you use tie-plates if you can get them?

A. Yes, sir.

Q. Does it save the use of such heavy ties if you use tie-plates?

A. No, sir; we get all the oak that we can; we can't get the heavy ties, except a few.

Q. You have in your Defendants' Exhibit KK—Darling, as the contract price of ballast, 27 cents per cubic yard. On what is that contract price figured? That is 27 cents per cubic yard; how do you establish the yardage?

A. Those contracts are let under certain specifications which require us to furnish a shovel, furnish the necessary track into the pit and such additional tracks as are necessary to take care of the shifting of the cars and the taking up of all this material and returning it and the measuring of the material in excavation in the borrow-pits.

Q. The ballast that you pay for is the ballast taken out of the excavation?

A. Yes, sir.

Q. By the contractor?

A. Yes, sir.

Q. Now, you have estimated here, for instance, "Ballast eleven inches under ties, 3,125 cubic yards per mile, at 80 cents;" how is that yardage measured?

A. That is the yardage which is under and between the ties and is actually used as ballast.

Q. And that is not measured, then, in the same way as the yardage covered by the contract price?

A. No, sir.

Q. One being measured in the excavation and the other estimated by you to exist on the System, being measured in place?

A. Yes, sir.

Q. What, in your experience, is the difference between the yardage for which you pay under the contract and the yardage which you estimate as in place and as the basis of your estimated cost of the present construction of the System?

A. Well, it varies all the way from fifteen to forty per cent.

Q. That is to say, fifteen or forty per cent, then, of the yardage that you pay for is not included within your estimate?

A. No, sir.

Q. Do you know of any way of correcting that expense?

A. No, sir.

Q. How does that loss occur in practice?

A. It occurs in various ways: First, by settlements of embankments. Those embankments may have been completed for several months before it is ballasted. That leaves a very uneven surface. The banks may have been washed away by the elements, or there may be some narrow banks which the original contractors left. When they come along with the ballast, these are all filled out; that is the cheapest and practically the only way to do it. And in that way we not only have to take out of the pit what we put under the ties and between the ties, but we also have to even up this road-bed for a foundation and also widen some of the banks. It is very difficult to plow off this material without wasting a lot down the side of the banks, and that is what actually results, in practice.

Q. Is there not some loss in the course of transportation, also?

A. Yes, sir; yes, sir, a great deal. That is especially the case where the aprons are poor or the cars are poor and they leak, and that leaks out between finished track which we have

to go over again and clean out and put in proper condition for drainage. That is an additional expense which we cannot estimate in here and has to go into contingencies. We can, of course, get at the number of cubic yards extra that we take out of excavation and pay for, from our vouchers and our measurements, but what it costs to finish up old track after we have hauled over it and got ballast distributed over it, it is almost impossible to say.

Q. And you know of no way of determining what that actual percentage of loss is?

A. No, sir, I couldn't tell you now. I don't know how to get at it, but—

Q. But you lose, you think, from 25 to 40 per cent?

A. Yes, sir. We can tell what the actual loss is; it runs from 15 to 40 per cent. We can tell what the actual loss is on work we have done for the last three years. I will modify that by saying loss in yards, not in dollars.

Q. Now, I ask you again, Mr. Darling, what in your judgment, based upon your experience and upon your knowledge of your profession, is the fact with regard to the reasonableness and fairness of your Exhibit FF and the figures contained in it?

A. I think it is very reasonable, and the only thing that I could criticise in that would be—and I don't know that I would criticise it—the cost of transportation. That is something I do not know what it cost, and we have used three-quarters of a cent a ton a mile. I don't pretend to know whether it cost that much or not, or whether it costs more or not. That is simply something that we must assume.

Q. Transportation of ties, rails, etc., you mean?

A. Transportation of ballast.

Q. I am talking about Defendants' Exhibit FF. What do you say of the reasonableness on the whole of those things?

A. Well, that is correct, as far as I know.

Q. It is correct excepting as to the item of tie-plates?

A. Yes, sir.

Q. Now, you were speaking of your Exhibit KK.

A. That also occurs in this same exhibit as to ballast.

Q. Defendants' Exhibit KK is merely the details of the item of Ballast in your Defendants' Exhibit FF—Darling, pages 1 and 2?

A. Yes, sir.

Q. With a slight discrepancy with regard to the cost of ballast on page 2, referring to the average cost of one mile of branch lines and sidetracks, and the aggregate of the details in your Defendants' Exhibit KK?

A. Yes, sir; in one instance it is $719 and in the other $721.

Q. How do you account for that difference?

A. Well, it is a clerical error that is pretty hard to find.

Q. What have you to say with regard to the reasonableness of those figures?

A. Well, I think they are very reasonable.

Q. That is based upon your experience and the actual prices that you have paid?

A. Except that, when we completed our ballasting, this item would not cover the cost of it.

Q. It wasn't low enough, then?

A. It was not heavy enough to cover the cost of it.

Q. To cover the actual cost to the Company?

A. Without that item of Contingencies in there.

RE-CROSS EXAMINATION.

By Attorney General YOUNG:

Q. In Defendants' Exhibit KK it appears that you insert as an average haul for transportation of ballast forty miles?

A. Yes, sir.

Q. That, in your opinion, is a fair average haul?

A. Yes, sir, from the location of our ballast-pits in Minnesota.

Q. I don't know that we quite understood your correction on that matter of tie-plates. In your Exhibit 2, at page 19, under the head of Labor, you have the item Placing Tie-plates, 5,760, at ¾ of a cent, $43.20, this sheet being devoted to the estimated cost of track-laying per mile. Now, in your testimony you stated, I believe, that only about three per cent of your road in Minnesota is tie-plated?

A. It figures out a little more than three per cent, something like six per cent. It is really 28 miles.

Q. 28 miles; and your mileage in Minnesota is about a thousand miles, isn't it? Wouldn't it be a little less than three per cent?

A. 686 miles, I think. If you take sidetracks and everything into consideration, there is about 1,500 miles, all told, fifteen hundred and some odd miles.

Q. Mr. Morgan says there are 967 miles main tracks and branches in Minnesota. That would be substantially three per cent, if that is correct.

A. There are really 28 miles actually tie-plated; if it was all in one item, it would be 28 miles of main track tie-plated.

Q. And assuming that your mileage in Minnesota is substantially a thousand miles, that would make, in round numbers, three per cent of your track that is tie-plated?

A. Yes, sir.

Q. That being true, should this sum $43.20 not have been three per cent of that gross instead of the amount given?

A. Practically that, yes, sir.

Q. Which would be about $1.30 per mile?

A. Yes, sir.

Q. And that is the extent of the error, isn't it?

A. Yes, sir.

Q. That same sum of $1.30 per mile should be carried into

Exhibit FF under the head of Tie-plates?

A. No, sir. That is correct.

Q. Exhibit FF?

A. Yes, sir.

Q. How is it correct?

A. That was the average number of tie-plates used per mile in the main track in Minnesota.

Q. The error is in the next item?

A. Yes, sir.

Q. Which is the cost of laying, and which included the $43.20, taken from Exhibit 2?

A. Yes, sir.

Q. Now, calling your attention to Exhibit KK, you have transportation, one and a half tons, an average of forty miles at three-quarters of a cent, or 7½ mills per ton per mile. You stated, I believe, that you didn't know whether that was a fair rate or not?

A. I think it is a fair rate. I think it is low, but I don't know.

Q. Do you know what your Company is getting for transporting lumber from the coast?

A. I think it is forty cents a hundred.

Q. Four mills per ton per mile?

A. Yes, sir.

Q. Just a shade over half this rate that you allow for ballast?

A. Yes, but then it is for this ballast distributed along the main line which they have to clean off.

Q. Well, that cleaning off is included in what you call contingencies, isn't it? You haven't included it in the transportation.

A. That is included in transportation, because it is maintenance of track.

Q. The section men do that, largely?

A. Yes, sir; that is, maintenance of track.

Q. Well, those are men that are getting regular salaries to take care of their various sections, and they take care of the track?

A. On construction work they are not. They would be, of course, if they were hauling over the main line after it was turned over to the operating department; but before that, we have to keep these section men on and keep this thing cleaned off to be in shape to be turned over. We haul over a lot of completed track before it is turned over.

Q. This item that you are referring to of cleaning track is cleaning it from the leakage from your ballast cars?

A. Yes, sir.

Q. Isn't that done by the section crew?

A. On the completed track it would be, if we were ballasting on operated lines; but take, for instance, the Portland and Seattle, or any other line that we start to construct, we start from one end and lay the track and ballast it; now, as we complete that ballasting we have got to ballast beyond and haul over completed main line.

Q. That completed main line usually is doing business in the meantime?

A. Oh, no.

Q. And has a section crew?

A. Well, we do do some business, wherever we can, to help out the public; but it is not really an operated track, it is not turned over to the operating department.

Q. You do it to help out yourselves, you do it to have earnings on the finished part of the track?

A. No, sir; oftentimes it is at great expense to do it.

Q. Well, as a matter of fact, under the ordinary conditions which have prevailed in Minnesota, and which would prevail here in the reconstruction of this track, the finished portion of the track would be operated for business?

A. Well, under the conditions which have existed, that would be a fact, but under the reconstruction it wouldn't be a fact.

Q. You could imagine a condition under which it would not be a fact?

A. Well, if we had to reconstruct the line it wouldn't be a fact, but if we had to reballast the present lines it would be.

Q. If you had to reballast the present line, the work of cleaning off the leakage would be left to the section crew?

A. Yes, sir, in which case they probably might have to increase the number of section men.

Q. Or make them work a little harder?

A. Yes, sir.

Q. Now, the transportation of ballast is the cheapest kind of transportation, is it not?

A. No, it is not the cheapest kind of transportation, because your cars have to return empty one way.

Q. Well, nearly all freight transportation is subject to that condition, isn't it, to a large extent?

A. Lumber is.

Q. There are empty cars?

A. Lumber is. Of course they get loads wherever they can, but in ballast you can't get a load at all. You always have to be empty one way.

Q. You have the cheapest kind of cars, the cheapest kind of engines and the cheapest crew that you have, for the operation of cars and engines, and your ballast trains are subject to the convenience of all other trains?

A. The ballast trains are certainly subject to the convenience of traffic—

Q. Yes.

A. —if it is on old lines.

Q. It is the very lowest grade of traffic that you have?

A. Well, on construction—

Q. Viewed from all standpoints?

A. On construction, you know, we don't have to interfere with traffic.

Q. That is, assuming that there is no traffic going on?

A. Assuming that there is no traffic going on.

Q. But that is an impossible condition, isn't it?

A. No, sir, it is not; it is a very probable condition.

Q. When you come to go right to the classification of freight, in any schedule of rates isn't gravel and sand in the lowest class?

A. I should presume it would be.

Q. And still you want to charge for it in this estimate twice what you charge for the transportation of lumber?

A. Well, but you want to remember it is all short-haul and the track is very hard to take care of while you are running the work-trains over it. The work-train is the hardest possible thing on track.

Q. Now, don't you think it is a fair proposition, Mr. Darling, to put in the cost of ballast, and all other transportation that is involved in construction, at the actual cost to the Company for carrying on the work and not put it in at a profit?

A. Perhaps so; that is a question that I don't think I am capable of passing on.

Q. Isn't that the theory on which the charge for transportation in this branch of the business is made?

A. Not in making up the estimate for Minnesota. In making up the estimate for Minnesota, we have used tariff rates throughout, except for ballast.

Q. The cost of the road is the basis on which you expect to charge the public rates so as to give you a permanent income on your investment?

A. That is something I don't know anything about. What I am getting up is simply the cost of reproducing this railroad.

Q. Isn't that true?

A. Perhaps so; I don't want to pass upon it.

Q. You expect to charge for such transportation as enters into the construction at a rate which gives you a profit upon that transportation—

A. Well, I am not—

Q. —and then to charge the public a profit on the transportation?

A. I am not in shape to argue that. Here is simply a fact that I have used. Now, I will leave that to somebody else to argue that knows more about it.

Q. Who told you to use it?

A. No one told me. That was what I consider a fair price to use.

Q. On what basis did you reach that conclusion?

A. On the cost to the Railway Company.

Q. How did you compute the cost, with what did you compare it?

A. Well, I merely compared it in this way: that they generally say that as a general rule we charge to construction a half a cent a ton a mile. That is what has been our charge for a long time. Now, in addition to that, we have got a lot of extra maintenance of track, we have got a lot of extra maintenance of equipment, in this class of work.

Q. Where did you get the half a cent a ton a mile—that is just an arbitrary?

A. That is just the general talk; I don't know whether it costs that or not. I am not competent to pass on those things.

Q. So, as a matter of fact, you don't claim to know anything about whether that is a reasonable item or not?

A. Except in a general way.

Q. Or whether transportation of material used in construction ought to be put in at tariff rates or at actual cost?

A. No, sir, I do not.

Q. You know that Mr. Berry testified that in his opinion

about four mills per ton per mile was a fair price for the transportation of construction material?

A. Well, I can merely say that I have never worked this thing out and I can't tell you, like I worked the others out.

Q. But you do insert it as a part of your estimate?

A. And what I consider a fair price.

Q. You put it in here as the testimony of an expert?

Mr. HOW: I think he has stated all the time that it was arbitrary.

WITNESS: I don't claim to be an expert in the cost of transportation.

Q. Well, I should think you would confine your expert testimony, then, to something that you understand and bring in somebody that does know.

A. I have simply stated that this is an arbitrary assumption, subject to change.

Attorney General YOUNG: If the Court had power to rule upon the admissibility of testimony, I think we would ask to have it stricken out and that would clearly dispose of it. I I think that is all.

Mr. HOW: Have you offered these various exhibits that he has produced this morning?

Mr. O'BRIEN: No, these were all connected with Mr. Durment's cross-examination and we have come here to-day simply, as you know, to accommodate Mr. Darling. As to how many of these details will be offered will be a matter of future consultation.

The MASTER: They are not, then in evidence as yet?

Mr. O'BRIEN: They are not in evidence as yet.

Adjourned until Friday morning, September 25th, at 10 o'clock.

FEDERAL BUILDING, Monday, September 28, 1908.

An adjournment having been taken from Friday morning, September 25, 1908, to this date, the hearing was resumed at 10 A. M.

LESTER B. ELWOOD,

recalled on behalf of Complainant, testified:

By Mr. How:

Q. Mr. Elwood, I desire a little further information. I should like to have you state again, but more in detail, if you can, what elements you take into consideration, or did take into consideration, in arriving at your conclusion with regard to values of the Northern Pacific real estate in Minneapolis that you were called upon with others to appraise.

A. In general, the same elements or factors that enter into the valuation of any property: First, its availability or adaptability for business or residence purposes; its topography; the asking and selling price on the part of owners of property contiguous to it; the price at which property has been sold in that particular vicinity; the comparison of values between this property and similar property located in other parts of the city; the comparison between the values in Minneapolis and in other cities of similar size and of larger size; the values placed on land in that vicinity by myself in negotiating mortgage loans; the record of sales kept by all real estate offices for past years; the loans made in that vicinity in past years; the foreclosure sales; in fact, I could give you factors that would keep you here a long time. It is difficult to state precisely all the factors or elements that enter into a proper valuation of real estate, of this character or any other, in a large and growing city. Another factor that we take into consideration is the prospective growth of the city. That may be called speculative, and yet it is not, in a way. A city that is growing and is surrounded

by a country that is growing that is tributary to it will have a better value than in a city where its growth is the other way. That is another factor that enters into it.

Q. The Northern Pacific property that you were called upon to appraise is continuous in extent, in location, so to speak; that is, it does not consist of isolated tracts, here and there, but is all connected, necessarily; I take that to be the fact?

A. Yes, sir.

Q. In appraising property of that kind, which has been collected together and conjoined together, so that it forms one entire property, is there, in your judgment, an element of value to each tract composing the large tracts, based upon the fact that it is a part of the large tract and can be used as a part of the large tract?

A. A decided element of value.

Q. That is to say, in a railway right-of-way through one-half of a block, occupying a tier of lots in a block, would you say that any lot in that tier, comprehended within this right-of-way, has an added value from its adaptability to that use and from its being a part of that tract to what it would have if it were an isolated lot, for merely residence or some other purpose by itself?

A. That is true.

Q. It would have an enhanced value?

A. It would have an enhanced value.

Q. And would you take that into consideration in justifying your valuation of property so located?

A. I would. I thought I covered that (not specifically) when I said, in placing a value one of the elements was its adaptability or availability for certain uses.

Q. I think you did, but I wanted to particularize.

A. I think I did, but I was not as specific as you are.

Q. Now, you had furnished you, plats showing the Northern Pacific Railway property in Minneapolis, and you took (I

think you explained before) certain localities and placed what you thought a fair average value, per square foot, of the property in those localities, and then took another locality and applied the same method?

A. Yes, sir.

Q. I find the first item upon your Ex. 22 to be between Marshall, University avenue, Oak street and 26th Av. S. E., the valuation of which is put by you at thirty cents per square foot. What have you to say in explanation or justification of that valuation? How did you arrive at those figures?

A. I think that was covered by my answer to your first question, as near as I can cover it.

Q. Did you have any other information excepting the general elements which you considered with regard to that?

A. No, except this: that prior to placing the valuation on this property we had valued the property of other railroads (the Omaha and the Great Northern, I think; my impression is there was another, but I am not sure,) and this came on after that, and we had a comparison of values in that. That fact and this answer to your first question covers it.

Q. I will ask you again, (I think I asked you before) in placing a valuation upon this property, did you at all consider the amount of what has been called a "hold-up" to a railway company in its acquisition of real estate?

Mr. DURMENT: He testified before that he did, I think, on his other examination.

Mr. HOW: That he did consider that?

Mr. DURMENT: Yes.

Mr. HOW: Well, now, all right, if he testified that he didn't, but I am asking him now if he did consider it.

Mr. DURMENT: All right.

A. I do not think we did, to any great extent.

Q. Was your valuation increased through the fact that you were considering the proposition of a railway company's

acquiring this property, over what it would have been if you were considering the proposition of any other concern acquiring this stretch of property?

A. I do not think we considered it would make any difference whether it was a railroad corporation or someone else that had to acquire this particular piece of property. I do not know of any other person or corporation that could acquire it except by purchase other than railroads; they could condemn.

Q. Do your figures represent the figures at which you thought it would be possible, if this property were all vacant, to acquire the property for railroad purposes? Would you undertake to acquire it for that sum?

A. If this particular property were vacant and the other roads that are now there were there, it would be a physical impossibility, in my opinion, to acquire this property at the figures which we have placed upon it.

Q. So that your figures do not intend to represent your judgment as to what it would cost you to acquire it for railroad purposes if it were now vacant?

A. No, sir, except so far as it might possibly unconsciously affect our values, as a question of ethics, largely.

Q. What effect upon your valuation would the fact that property perhaps four or five blocks away had sold for a price materially less than that which you placed as your valuation within a recent period?

A. That would be one of possibly a dozen elements or factors that would enter into a consideration of values; it might temper it somewhat; it would not, by any manner of means, be the sole test of the value of this property.

Q. It would not dominate your judgment?

A. No, sir.

Q. Do you know, from experience in your business, many such transactions at less, and many transactions at more, than

in your judgment is a fair market value of surrounding or adjacent property?

A. Yes, sir, I do. Not particularly of this first piece that you called my attention to; I am not as familiar there as I am—

Q. I am merely talking in general now.

A. In general, yes, sir.

Q. Is it the custom of real estate men, if they list a lot for sale, and a lot in the neighborhood is sold for less than they have it listed for, to reduce their price?

A. No, sir.

Q. They might be more inclined to raise the price if a lot sold for more than they had it listed for?

A. They pay more attention to the maximum value than they do to the minimum; naturally would—the seller; a buyer will take the other view.

Q. The market value, I take it, Mr. Elwood, is the value as between a person desiring to sell and a person desiring to purchase; it is the consideration arrived at between two such people?

A. The market value would be found between those two figures, but would not be determined by that factor. There would be other factors that would determine its market value, but naturally it would be found between the seller and the buyer.

Q. That always means, of course, as between a seller who is willing to sell but desires to get as much as he can for his property?

A. Yes.

Q. Now, in a case of a continuous tract like a railway tract, used for operating purposes, if a route is designed through a territory, what is the effect, in your experience, of that fact upon every lot in the territory, if there is any?

Mr. DURMENT: We object that the witness has not shown that he has had any experience in that line or is competent to

express an opinion upon that subject.

The MASTER: The objection is noted.

A. The natural effect that any extra demand for property would have on its value, particularly so if it is known that a railroad is attempting to buy a right-of-way and needs the property, thereby taking so much off from the market, and, additionally, furnishing trackage to property through which the railroad runs, immediately adds value to the surrounding property.

Q. And it adds value to all property surrounding it, as well as to the property which the railroad itself must take?

A. It does; for the reason, as I stated, that it takes off from the market so much property. The question of supply and demand, as applied to real estate, is different from that of any other commodity, in my opinion. When real estate is taken it is gone, and gone forever. Commodities that are manufactured, if there is an increased demand, there can be an increased supply put on the market. The land that this building stands on is out of the market except for this use; so that when land is taken away and is used for railroad purposes, it not only lessens the demand at that time but lessens it for all time to come; and the smaller the supply, the better the price to be obtained for this or any other property.

Q. The property from Third avenue North, on the west side of the river, to Plymouth avenue, you appraised at $3 a square foot; where is that property, Mr. Elwood?

A. That property is bounded southerly by Third avenue; northerly by Tenth avenue; easterly by First street, and westerly by Second street.

Q. What is your judgment with regard to a claimed valuation of the property between Hennepin avenue and Fourth avenue North, which I take it is a part of that tract which you have appraised at $3—

A. Yes.

Q. —of $1.395 a square foot?

A. If such a valuation was made, I should consider it very inaccurate.

Q. Very low?

A. Very low; extremely low.

Q. What circumstances or conditions do you know of that would justify such a valuation as a fair valuation?

A. The fact that surrounding and contiguous property—

Q. No, I am speaking of what circumstances do you know that justify that low valuation?

A. I know of none.

Q. Do you know of any?

A. No.

Q. What is your judgment of an alleged valuation of the property of the Northern Pacific between Fourth avenue North and Plymouth avenue North, which I take it, is the rest of that tract, valued by you at $3 a square foot, of $1.023 a square foot?

A. The same answer as to the preceding question; inaccurate and very low.

Q. Do you know of any conditions that in your judgment would tend to justify so low a valuation as that?

A. None whatever.

Q. That property is situated where, with regard to the general description of the city of Minneapolis and its railway facilities? Can you describe its location generally?

A. It is in North Minneapolis. North Minneapolis is all that territory lying north of Hennepin avenue; near the river, near the warehouse property, and between the terminals of the Omaha and the Soo roads.

Q. How, in general, is it situated with regard to its facility for railroad operation and value for railroad operation?

A. It is quite central.

Q. Is property of that character limited in the city of Minneapolis?

A. It is.

Q. And how is this situated as compared with terminal properties of other railway companies in the city, advantageously or otherwise?

A. As advantageously and as central as any large freight yards in the city of Minneapolis.

Q. You have looked over your valuation recently and considered it with care, have you not, Mr. Elwood?

A. I have.

Q. What changes would you desire to make in that valuation, if any, if you were to make it to-day?

Mr. DURMENT: Well, now, that might call for a change he would make by reason of an increased value above the value of the date as to which his testimony was given before; if so, that is entirely immaterial to this case and incompetent. If it refers to a revision of his values as of the date he fixed the values before, that would be a different matter. If it is the former, we object to it as immaterial.

The MASTER: Objection noted. Answer.

A. I would change it. First, all values in the city of Minneapolis have increased since this valuation was made, from the growth of the city and from other causes. I would change it, aside from that fact, in some minor details, by cutting down the valuation, from the knowledge I have obtained since of some sales; in the major part and nearly all of it, aside from the growth of the city, from the facts that I have since learned and from additional study, I would decidedly increase the valuations placed upon the property at the time they were given; that is, I would increase the values, at this date, for reasons other than the growth of the city, over what I placed it when the valuations were made.

Q. In general, and taking the valuation in the aggregate,

Mr. Elwood, how does your present judgment compare with the judgment at the time the report was made to the Railway Company by you and your associates?

Mr. DURMENT: We object to that as immaterial if it calls for comparison of present values with the values at the time he made his valuation before, as immaterial; if it is a question of whether, with his new light, he would increase the values of that date, then it is not material.

The MASTER: Objection noted. The witness may answer.

A. I would, at this date, consider the values placed upon this property under discussion, especially that part of it that is in the business district, as ultra-conservative at the time they were made and lower than their actual value at that time.

Q. Your judgment is, then, that your valuations, in the aggregate, when made, were conservative and low?

A. Yes, sir.

CROSS-EXAMINATION.

By Mr. DURMENT:

Q. I understand from your answer to the last question that it is now your opinion that the valuation which you made on these railroad properties for the Railroad Company, some time ago and to which you testified on your former examination, were not reliable?

A. No, sir, I did not so answer.

Q. That those valuations were not the true values but were too low?

A. My answer intended to convey the fact that additional study of the question had brought about that change in an opinion that additional study of any question would bring about, not that the first statement was unreliable.

Q. No, but that your present opinion is that your first opinion was not a sound opinion?

A. No, sir, I think it was fairly sound.

Q. And you think your valuations you first testified to were the fair values?

A. Fairly so, yes, sir, but leaning to conservatism rather than the other way.

Q. In other words, you have lost your conservatism since by thinking it over; that is the proposition, is it?

A. No, I think not.

Q. You have also said here that the putting of a railroad through any section would have the same effect that anything else which would make an extra demand for property had; that is to say, that the extra demand for property would tend to increase its value, and the fact that a railroad was to be placed alongside of the property where it would have trackage facilities and that sort of thing would also increase the value of the property along the proposed line. Now, doesn't that depend altogether upon the character of the property through which the line is proposed to be run?

A. Not altogether.

Q. Well, doesn't it very frequently?

A. Not very frequently. I can see how, from the drift of your question, if we were to take Nicollet avenue and Sixth street (which is now retail property worth five or six thousand dollars a front foot, forty or fifty dollars a square foot) condemn it and put some trackage up there, it would injure the adjoining property, but I do not know of any such cases in my limited experience.

Q. Of it having been done?

A. No. It is possible, but not probable.

Q. You have seen, have you not, oftentimes, in various towns and cities, (perhaps not in Minneapolis) where railroads have gone through business sections, that they have deteriorated and become second and third-class properties, when they were formerly first-class properties?

A. I cannot recall any instances of that kind. It possibly does so.

Q. It would also be true, would it not, that if a railroad were to run through a good residence district and a residence district which was at that time remote from the business district, it would decrease the values of property?

A. It would.

Q. Have you known cases of that sort?

A. No; railroads are generally put in ahead of residences. It rarely occurs that the railroad goes through a good residence district.

Q. Well, possibly, but it is true, is it not, in many cases?

A. Yes; I can answer your question this way; we have one such case in Minneapolis, where the H. & D. went across the city, crossing Park, Portland, Third and Fourth avenues, at a time when there was not much value there. If that road was not there now it would sell for more money than it sells, but when it went through there it didn't decrease its value.

Q. Oh, yes, but you were placing your values, as I understand it, upon the theory that the property adjacent to the property taken by the railroads was in exactly the same condition it is now except for this particular road?

A. Oh, no; I didn't state that.

Q. Well, do you mean to say that if there was no railroad at all along the line where the Northern Pacific runs now, or near to it, the properties would be worth anything like the values you have placed on them?

A. It differs in different locations.

Q. I know, but take it all through.

A. If you will particularize, take any one tract, I can answer it.

Q. Well, I will ask you as to all of them, and if they differ you can state where they differ.

A. All right. This property where the bulk of the value is

placed, I haven't figured it up, but I assume it is fully half of it, is of much more value than it would have been or ever was by the fact that the railroads are there.

Q. Certainly.

A. The tracts in the outlying districts, where property is valued from fifteen to thirty cents a square foot, in 99 cases out of 100 are more valuable than if the roads were there or if they had never gone there. There are exceptional cases, possibly, where good residence property might be injured by the crossing of railroad tracks.

Q. Then, the great bulk of this property you have valued has been placed by you at a higher value than it would have been if there were no railroads along the line where this property is?

Mr. HOW: No railroads in Minneapolis at all?

Mr. DURMENT: I say along the lines where these railroads are.

WITNESS: That is true. When you furnish an added use for property you add to its value. If there were no railroads there there would be so much more property on the market, so much for sale, a greater supply and a less demand. That is a self-evident truth which should be apparent to anybody. If you increase the demand and diminish the supply, it increases the value.

Q. And the mere fact that it has a use and value for railroad purposes and can be used as such, as railroad property, increases the value of it?

A. In most every case, yes, sir.

Q. You said here that the fact that a piece of property was a part of a large parcel or could be used as part of a large tract, added to its value.

A. I did.

Q. Is it ordinarily true in city property, in a business district, that, for instance, a block or two blocks contiguous will

sell for more as two blocks than they would in separate lots suitable for building?

A. No, sir.

Q. What?

A. No, sir.

Q. They would sell for less, wouldn't they?

A. Yes, sir, at wholesale in place of retail.

Q. And is it true that the fact that a railroad company wants a hundred lots, scattered along its right-of-way, not contiguous, owned by a hundred different owners, the mere fact they are to go into the right-of-way and become part of one continuous tract, increases the market value of those 100 lots?

A. Yes, sir.

Q. Why?

A. Possibly I can answer by giving you an example. Warehouse property has a value as warehouse property. In a warehouse district, there may be a lot 40x100 which has a certain value; it is too small for warehouse property; if joined to it you get a tract that is 100 feet square, or 100x200 feet, it has more value per square foot (that tract) than the first-named tract. It is true with railroad property. Its value depends on the use it can be put to, and a railroad that runs from nowhere to nowhere across a block would have little value as railroad property. Running across a city where it can be used as terminals, either as terminals or as an inlet or outlet of the city, it has more value as railroad property.

Q. Well, now, evidently we are not talking about the same thing.

A. I think I understand your question; I thought I answered it.

Q. Take your example: There is a piece of property that is in the warehouse district; it has a certain value for warehouse purposes, or would if it was large enough to be used for warehouse purposes, it isn't large enough to be used for ware-

house purposes—

A. Yes, it can be used for a small warehouse.

Q. Not as you—

A. The large can be used for both purposes, the small can be used for only one.

Q. Possibly, but of course a man who had an adjacent tract might be willing to pay more for it to add to his large property than a man that wanted it by itself?

A. Possibly.

Q. But having only the small piece, so it could be used only for a small warehouse, it would be of less value to the man who owned it, wouldn't it?

A. Yes, sir.

Q. So then it might make its market value less rather than bigger?

A. Yes, sir.

Q. Now, suppose, for instance, that a railroad was coming along there and that warehouse property happened to be so situated that the railroad wanted to take it into its right-of-way and could do so,—that little piece of warehouse property—do you mean to say the fact that it could be taken into the railroad right-of-way would increase its market value?

A. The fact that the railroad wanted it creates an additional demand for the property and an additional use; it still has its value as warehouse property; it has its added value as warehouse trackage property, and as being available for railroad purposes.

Q. Yes, but it is to be taken into the railroad right-of-way.

A. Theoretically,—I understand that is your question?

Q. Yes, that is the question. Now, then, that right-of-way would be for right-of-way purposes—

A. Yes, sir.

Q. —it might be for trackage, or it might not be; it might be simply to make a gravel-pit or it might be simply to even

up their line; now, do you mean to say that because the railroad company wanted that property it would be worth more than it would be to the man who owned it, would increase the price for it?

A. Worth more to him? You say worth more to the man that owned it?

Q. I mean its market value.

A. Why, certainly; it should be evident to anyone it would increase its market value.

Q. Then the railroad company, because it wanted it for right-of-way, would fairly be required to pay more for it than its market value for other purposes; is that what you mean?

A. The market value of the property is made up of the different uses that it can be put to. It is not a fair question to say what would a railroad pay for it for that one purpose or what would a man pay for it for a gravel-pit, or what would he pay for it for a warehouse.

Mr. HOW: Or a residence?

WITNESS: Or a residence. Its value is the aggregate—

Mr. HOW: Or a brewery?

WITNESS: —the use it might have.

Q. Well, there would be no change in the situation of this property, as I take it, no change in its physical condition, at the time it is owned by the man who could use it for a small warehouse, it is capable of use for railroad purposes just the same as it is after the railroad acquired it?

A. Certainly.

Q. Now, then, the market value is one thing when the man who owns it and can use it for warehouse property owns it; the question is would the fact that the railroad company wanted to take that into its right-of-way and actually use it for right-of-way purposes increase the market value of the property?

A. It would.

Q. Considerably, would it, ordinarily?

A. It differs in different cases.

Q. Then in case fifty men each owned a lot at a different place along the line of a proposed right-of-way, or an existing right-of-way, for that matter, and they were bought by the railroad company and included in its right-of-way, would the market value of those lots be more after the railroad company had thus acquired them and put them into the right-of-way than they were before?

A. Decidedly so.

Q. Then in making your valuations along here, as I understand it, you have taken into account (you said it to-day and you said it in your former examination) the increased value which this property you have valued had by reason of its additional use as railway property?

A. Yes, sir.

By Mr. O'BRIEN:

Q. You say you took a number of different things into consideration in arriving at your judgment as to the value of this land?

A. We always do in any place.

Q. Necessarily your judgment was largely based upon the values placed upon contiguous land, was it not?

A. No, sir.

Q. Well, was it not amongst contiguous land that the greatest number of sales have occurred that you have spoken of?

A. There might be, and there might be other cases where there would be no sales.

Q. But in the land which is contiguous to the right-of-way there have been recently a greater number of sales than has been included in this right-of-way?

A. Yes, sir.

Q. Largely over an old right-of-way, isn't it, the Northern Pacific right-of-way?

A. Oh, they are acquiring right-of-way all the time.

Q. The greater portion of it?

A. The greater portion of it has been acquired during the last twenty or thirty years.

Q. And of course such foreclosures as you examined were altogether outside of the right-of-way?

A. Yes, sir.

Q. Now, I suppose it is true, is it not, that in real estate we find more or less relation between different tracts of land—they bear considerable relation to each other, do they not?

A. Yes, sir.

Q. You find that there is a gradual increase in the value of railroad lands as well as a gradual increase in the value of contiguous properties, do you not?

A. In a growing city.

Q. In a growing city that is true?

A. Yes, sir.

Q. And very much in the same proportion?

A. No, not in the same proportion. There is only a limited amount of city property that can be used as terminals, and as that is exhausted that which is remaining and suitable for the purposes will increase in value much more rapidly than other property of which there is a greater supply and less demand.

Q. But that is the case, is it not, where the property originally has very little value? For instance, where swamps are reclaimed.

A. No, that proposition is a general one. I wish to make myself clear: that properties suitable for railroad terminals, especially in the city of Minneapolis, (and more so in the city of St. Paul, which is topographically somewhat different) would increase in value more rapidly as the city grows than almost any other class of property.

Q. So far as present value is concerned, the present value of property is what it will sell for, is it not?

A. Not entirely so.

Q. Is it not almost entirely so?

A. No, sir. It depends on the conditions when the property is offered. There was a time last fall when you could not have sold a $50,000 property for $10,000.

Q. Of course, there are always short periods of time when the selling price of property may not be the fair test, either because of the difficulty of selling or the difficulty of purchasing, nor would it be a fair test of the value of these terminals to ask what the railroads would sell them for, would it?

A. No, sir.

Q. Now, just eliminating unusual circumstances, is it not true, as a general proposition, that what property will sell for is about its value?

A. That is true with some commodities, like wheat, cotton-goods and things of that kind that there is always a ready market for; it is not true so far as real estate values are concerned. That has been my experience.

Q. Wouldn't it be true as far as real estate values are concerned if it extended over a considerable period of time?

A. Oh, yes, what property would sell for in two or three years, but—

Q. Then a complete record of the selling price of real estate for a number of years would be the very best test that could be ascertained as to what its value was during that time, wouldn't it?

A. Unless you should pick out for a number of years the years of depression. That would not be a fair test any more than it would be a fair test to pick out a number of years when speculation was rampant. That would not be a fair test.

Q. No, but if you took a fair average period of time and ascertained the selling price covering a sufficient length or period of time, that would be the very best test, wouldn't it?

A. It would be one of the good tests, Mr. O'Brien; I don't

say it would be the very best.

Q. What would be a better test?

A. The income that could be derived from the property under consideration if suitably improved is one of the tests; the comparison with other cities is a test. Let me cite you to an instance—

Q. No, please keep to the state of Minnesota now.

A. I will keep within the state, but I was trying to make my meaning plainer, that was all.

Q. In the case of railroad property, once it is included within the terminals of the large systems, it is withdrawn from the market, is it not?

A. Naturally, except as it may be sold from one railroad to another.

Q. So that if you were to determine the price of that property years after it was purchased, you could only do it by comparing it with other property, contiguous property, could you not?

A. With the value of other property?

Q. Yes.

A. That is true.

Q. Is that true?

A. That is one of the factors.

Q. Now, if the selling price of property, continued over a series of years, is a good and a fair test, and if you have a piece of property which has not been bought or sold for a great many years, the only way of arriving at its market value so as to apply this good and fair test, is by ascertaining the selling price of contiguous property, is it not?

A. That is not entirely true. I will explain this if you will allow me.

Q. It is the only way of applying that test?

A. May I ask which test you speak of?

Q. I am only speaking of one test now. You said the test

of the selling price of property continued over a series of years was a good—

A. A good one and one of the tests.

Q. And one of the best tests?

A. Yes.

Mr. HOW: Why not take the specific example of the union depot property in St. Paul, for instance, and property on Third street near it, or the union depot property in Minneapolis, and property across the street? There is a specific example.

Mr. O'BRIEN: Well, you will have to post me on that, Mr. How, because I am not familiar enough with it to know whether that would be safe or not.

WITNESS: Let me make one test, Mr. O'Brien, if I may—and the Master. I wish to add this—which test would you take in a case of this kind that is under my notice: Two years ago a piece of property was advertised for sale at $32,000, the Sutherland tract, on Lake Harriet. It was sold at $32,000. It has since been sold for $95,000—which test would I use, the $32,000 or the $95,000? There has been no change in the conditions with respect to the growth of the city. How could we use that as a sure test of values, and which figure would we take?

Mr. DURMENT: Depending on whether you wanted to boost prices or depress them.

WITNESS: The reason I am stating this, I am trying to show by my answer that that is not the sole nor the absolutely best test.

Attorney General YOUNG: You are a real estate man, what test would you use?

WITNESS: Different tests for different tracts of property.

Q. Well now, you have not answered my question, Mr. Elwood. You said in case you were putting a value upon a tract of land no part of which had been sold for a great number of years, that the prices for which contiguous property had sold over a sufficiently long period to give the average, would be a

good, and I understood you to say, the best test—

A. One of the best tests.

Q. —one of the best tests to apply to it.

A. Provided the same conditions applied to this property that was contiguous to the property that was sought to be appraised. It might be contiguous and be on top of a bluff, or it might be contiguous and be in a swamp.

Q. Well, of course, wherever an intelligent man was making an examination of that sort and ascertaining entirely dissimilar conditions, it is presumed that he would modify his judgment?

A. Certainly.

Q. So that in the case of determining the value of a railroad terminal or right-of-way, acquired (at least the principal part of it) many years ago, the test you have stated to be a good one could not be applied except by taking into consideration the sales of contiguous property?

A. I do not understand the question.

The last question was read to the witness.

WITNESS: The question is too blind to me, I don't understand what it means.

Q. Well, what I mean is this: Would not the best test which could be applied to ascertain the market value of the terminals now under consideration, be the sales of contiguous property for a series of years past?

A. It would be one of the best tests provided the conditions —the lay of the land surrounding the contiguous property was the same as the property under discussion. For instance, I might lay before his Honor, the Master, a plat here, you might show that I valued this property at $3 per square foot and you might show over here on the plat that it is worth 50 cents per square foot, that would be no test without the knowledge of the conditions surrounding each piece; they are contiguous but different.

Q. Is it not true with regard to most of the terminals, both in Minneapolis and St. Paul, that the land is made valuable only because it is used for terminals?

A. NO, SIR; it is not. It is made valuable because there is a necessity for terminals. If there were no railroads nor terminals and nothing but wigwams and tepees, it would not be of much value, but the fact that the terminal is there is not the only value that is given to it.

Q. Is it not true that the only value that the most of the land occupied by the terminals has is for terminals?

A. No, sir, it is not true in Minneapolis.

Q. For instance, what would the terminal property below the union depot in St. Paul be worth for any other purpose than terminal purposes, supposing you had wiped out the railroad companies?

A. I am not at all familiar with St. Paul values, I never owned or sold any property here; I simply know in general that the topography of the country here is such that it is more difficult to get terminals and they are more limited than in Minneapolis. I can quote you sales, Mr. O'Brien, if you wish me to, of property contiguous to this $3 per square foot property, that has sold and can be sold, at substantially my figures, and not for terminal purposes. That should answer your question.

Q. Well, I have no doubt that that is true, because the terminals are there.

A. No, sir, because trackage is there. Railroad trackage is not terminals.

Q. Isn't that included in terminals?

A. But you can have trackage and not terminals.

Q. And those terminals are very valuable because they are situated in the large cities of St. Paul and Minneapolis?

A. They are very valuable because it is very difficult to acquire property in large cities.

Q. That is just exactly what I am trying to get at. Isn't

it impossible to separate from the terminal property and the warehouse property and the wholesale property situated in these large cities—in fact, all property—isn't it impossible to separate or to assign so much of the value because of the railroads or so much of the value because of the population, it is a gradual growth all together, isn't it?

A. That is true.

Q. And a great deal of this property that is very valuable as terminal property is so located, over swamps, below bluffs, in different parts of the city, that it would have no value for any other purpose, but has a great value for that purpose; isn't that true?

A. That may be true. That is, where the bluffs are—we haven't them, I couldn't answer to that question from the standpoint of an expert because I never have handled that kind of property, Minneapolis has no bluffs or swamps where their terminals are located.

Q. Oh, you are speaking especially with reference to Minneapolis only?

A. I suppose I am speaking with respect to valuations placed by me on Minneapolis property and why I placed them.

Q. And the result of it is that it is impossible for you to segregate the values that property has because it is terminal property, because the railroads are there, from the value that the property has because they are large centers?

A. It would be a matter of computation to say how many cents or dollars per square foot is added because it is terminals or because it is warehouse or because it is retail or because it is wholesale. It is from the aggregate of those we form our opinion.

Q. Isn't it this, that if there were no such cities as St. Paul and Minneapolis, there would be no such terminals?

A. That is true.

Q. And if there were no railroads or terminals, there would

be no such cities, isn't that the case?

A. Yes; if there were no retail stores on Nicollet avenue, property there would not be worth $5,000 a front foot; I couldn't tell what it would be worth if there were no retail stores.

Q. You couldn't tell what it would be worth if there were no railroads in Minneapolis?

A. No.

Q. The result is that the values of property—they have all gone on together?

A. Yes, sir.

Q. There has been about the same ratio of increase between them, hasn't there?

A. No, sir. We have property in Minneapolis to-day that can be bought for less than it could be bought and sold for, and less than it would have sold for, twenty-five years ago, and other property that brings three or four times what it would have sold for; you can't say that it all increased alike.

Q. Mr. Elwood, I don't think that you understood me to mean that, but what I mean is available property that is used for large business purposes has gone on increasing, and you expect it will go on increasing, don't you?

A. Yes, sir.

Q. Of course there are isolated instances where property has become of very little value, but in general the movement has gone on in about the same ratio all over the cities and all over the country, hasn't it?

A. The general ratio which has applied.

Q. You find the same conditions in regard to farm lands that you do in regard to city lots, there has been a great increase in the ratio there?

A. Yes, but it will differ,—a thriving little city will be built up near some farm lands and those farm lands will be worth, for market gardening purposes, four or five times what they

would otherwise; there are conditions that will apply to all that. The land is no richer and won't bring any more per acre, but it is nearer the market.

RE-DIRECT EXAMINATION.

By Mr. How:

Q. If you have any examples in mind of sales, either since your valuation was made or shortly prior to that time, that in your opinion justify your expressed judgment with regard to these particular values at $3 a square foot, I wish you would state them.

Mr. DURMENT: We object to that as immaterial.

A. On Third avenue north, which forms the easterly boundary line of this tract in question, between Fourth and Fifth streets, sales have been made. I can particularize, I have some memoranda in my pocket, if I may refer to them—412 Third avenue South, 44 by 110 feet, with an old building of not much value compared to the value of the land, sold within the past two years to a paper company at Minneapolis for $25,000, 4,840 square feet.

Mr. DURMENT: Can you give us the date of the sale?

WITNESS: The sale was made to Mr. Taber within the past two years. I haven't the date here, I can get it. Including the building, that would be at the rate of $5 per square foot. Putting the building at its fair value and deducting it would leave the value of the land about $4 per square foot. The property adjoining it, with a somewhat better building, sold later to Mr. W. Y. Dennis, 44 by 110 feet, for $29,000—about the same figure.

Mr. DURMENT: Any improvements on that?

WITNESS: Yes, sir, a better building there.

Mr. DURMENT: What would be the value per foot, then, on this?

WITNESS: I should make it about the same.

Q. About $4 a square foot?

A. About $4 a square foot. A piece of property adjoining this, upon which there is a real-estate sign, and which I have been trying to buy for a client, and for which Friday I got a written proposition from the seller, the Walton Agency, is 100 feet front on this same avenue by 110 feet deep; there is no building on it of any value, an old frame structure; the best price I can get is $60,000, which would be at the rate of $5.50 per square foot. I am authorized to pay $45,000 for the property—not for railroad purposes. In June, 1905, a piece of property that was in our office, but we did not make the sale, owned by the National Life Insurance Company, of Montpelier, Vermont, at the corner of First street and First avenue south (not far from this) was sold by this insurance company to Janney, Semple, Hill & Company for $15,000. There was an old building on it, a frame structure with a brick barn, used as a saloon, of little or no value; it was pulled down.

Q. How much is that a square foot?

A. $5.80.

Mr. DURMENT: What is the size of that land?

WITNESS: 30 1/3 feet on First street by 86 feet deep. That property, I might add, was acquired by this insurance company by mortgage made in 1886, a mortgage of $10,000 on a written valuation, put in the application, at $25,000. It was sold at this figure by the mortgagee at a loss on what it had cost. Block 40 in Minneapolis, between Second street and Washington avenue and Second and Third avenues south, was bought by the government for a postoffice, sold to the government in competition with a half-dozen other sites. The government paid $390,000 for the property. There are 102,000 square feet. The Washington avenue front of this property is built on, old brick structures, none of them less than thirty years old. The Second street side is absolutely vacant and most of the avenue fronts are vacant. It sold at the rate of $3.80 per

square foot, including the buildings; 80 cents would cover the buildings. The city of Minneapolis is now, through its park board, acquiring or attempting to acquire Center block, so-called. That is the property bounded by Second street, Washington, Nicollet and Hennepin avenues. There is no building on this block that has been built there in the last thirty years. The commission has made its report, and if accepted by the owners of the property, the project will go through. There is 38,000 square feet in this property, the commission's report is some four hundred and seventy-odd thousand dollars, which, including the buildings, would be at the rate of $12.40 per square foot. I have charge of a piece of warehouse property on First street north, across First street from this tract that is now under discussion which I have appraised at $3 per square foot, a piece of land 60 by 150, owned by Mr. McMullen, of New York. I had an offer of $35,000 for it, which has been refused, and the price was put at $41,000. In this case there are some 9,000 square feet of land. Assuming the building at $12,000, which is its full value, would leave the value of the land $3.25 per square foot. At the price asked, by Mr. McMullen and Mr. Kendrick (who is a joint owner) of $41,000, it was shown that it has paid 6 per cent net on that sum.

Mr. O'BRIEN: We can beat that percentage with the Northern Pacific property.

WITNESS: This property I name is at $3.25 per square foot and I could realize $3 per square foot. I might name other instances if you wish me to.

Q. I think that is plenty. You are familiar with the property on which the mills on the main side of the Mississippi river are situated—what are they, the Washburn-Crosby mill?

A. On the west side?

Q. No, on the side that the Milwaukee tracks are on.

A. That is the west side of the river. There is the Washburn-Crosby and the Consolidated and the Pillsburys and the

Christians and a number of them there; the bulk of the mills are on the west side.

Q. I take it that the property that those mills are situated on would be available for warehouse purposes if there were no mills there?

A. It would.

Q. It would be valuable for warehouse purposes. What is your judgment with regard to the fact as to whether or not its availability also for milling purposes increases the value that that property would have over merely for warehouse purposes?

A. That should be a self-evident truth; the added use for it gives it an added value.

Q. So that you cannot take the selling value or the market value of contiguous property as an absolute test for the value of other property?

A. No, sir.

Q. Of any of the property in question?

A. On account of different conditions prevailing.

Q. The Mineapolis Union depot tracks are below grade, are they not?

A. Yes, sir.

Q. There is a narrow space between the higher grade and the river?

A. Where the tracks are?

Q. Yes.

A. At the point where the union station is that is true; it comes on grade as it goes each way.

Q. Would you consider it just to compare the value of the Minneapolis union depot trackage property with that across the street from the Minneapolis union depot going away from the river?

A. Property across the street is used for different purposes altogether.

Q. Is it available for railroad purposes?

A. Not without great expense on the part of the railroad company in the way of going under the streets and leveling the ground.

Q. Then I ask you if you would consider it fair to compare the values of those respective contiguous tracts, whether you would consider they were of the same value, or whether the conditions would be such as to make them entirely different?

A. It would be fair to consider the values by taking different conditions in mind, not fair to eliminate the conditions and simply compare as you would on a flat map.

Q. Simply because they are contiguous?

A. Yes, sir.

Q. If you should hear that that property at the corner of Hennepin avenue and Fifth street in Minneapolis had sold today for $50 a front foot, what effect would that have upon your judgment with regard to the remainder of the block?

A. No effect on my judgment of the value, it would have some effect on my judgment of the man who sold it.

Q. You do not, then, take isolated sales as a test of values?

A. No, sir.

Q. Without knowing conditions, as to whether they are forced sales, and whether there are other conditions that enter into the transaction?

A. No, sir. I wish to answer your question further about sales, (one more instance,) if you will bear with me. The Consolidated Milling Company, in this district you have just mentioned, and which is near this, have recently built an elevator and I was employed to buy land for them. I did not succeed because the man whom I represented would not sell at the price, but they paid, I understand, somewhat near the figures. I offered Mr. Henry Vanderberg $500 per front foot for a piece of land on First street and Fifth avenue south, Fifth or Sixth. The land was 50 by 100. He refused the offer

and they built without his land, they bought land adjacent, somewhere near the figures that they authorized me to pay.

Q. Somewhere near $5 a square foot?

A. Yes, sir.

RE-CROSS EXAMINATION.

By Mr. DURMENT:

Q. This last piece you speak of was where it could be used in connection with water power in the Mississippi river, wasn't it?

A. Yes, it could be used but I have no knowledge of any land as far west as that that is being used for that purpose.

Q. But it was to be used in connection with enterprises which did utilize the water power?

A. No, sir.

Q. It was not?

A. They would not use the water power, it was an elevator, not a mill.

Q. But it was adjacent to mills that did use the water power?

A. Yes, sir.

Q. It was wanted by a milling company?

A. Mr. Vanderberg's claim was that as he now had it improved, it paid him better to hold it than to sell it at that price. It was not improved with water power or a flour mill.

Q. But it was improved?

A. It has some scattered buildings, of not much value, but pay big rent; there are blacksmith shops, machine shops, and things of that kind.

Q. And that offer of $5 a square foot included buildings and all?

A. It included the buildings, although the buildings would have been razed to the ground; they were of no value to the man that made the offer.

Q. But applying the test that you say should be applied

in these matters, that of income, it had a large value?

A. I do not know whether his statement was true, that was the statement of the seller that it was paying.

Q. Now, with reference to this property across the street from the union depot that you speak of, which is of a different character, you say it is fair to compare the value of that property with the value of the property used for the railroad below the bluff there?

A. Yes, sir.

Q. But not to fix the value of the railroad property by that?

A. No, sir.

Q. Which would you say would be the more valuable on the market, the railroad property or the other property?

A. There is no market for the railroad property, I couldn't determine what that would sell at. The other property would sell at a figure higher than I have placed on the railroad property.

Q. It is good business property?

A. Yes, sir.

Q. And because it can be utilized for many purposes—

A. Yes, sir.

Q. —it has an increased value, in your opinion, over that of the trackage below there?

A. Over what I placed upon it. I have stated before, that I may have placed too low a valuation.

Q. But you have still placed it higher.

A. I say that this property across the street would sell for more than the valuation I placed on the union depot property, not to the Northern Pacific, but for some other company. I placed a value of $5 a square foot for the companies who own the union station property.

Q. And this would sell for more than that?

A. I am quite positive that it would.

Q. Now, take all these cases you have mentioned here of

sales in Minneapolis, they have been right in the heart of the heavy business district of Minneapolis, haven't they?

A. No, sir. Property in the heart of the heavy business district of Minneapolis will sell at $5,000 per front foot; I I have named only $500 here.

Q. That is retail property or what?

A. Retail property sells at $5,000 a foot; that is, the heart.

Q. That is the heart of the retail district?

A. Yes, sir; if you mean "heavy" by weight of goods handled, it would be warehouse property.

Q. And business done?

A. Well, of business done it would be retail property.

Q. The retail property does a heavier business than the wholesale, then?

A. Yes, sir.

Q. Take this property at 412 Third avenue south, the paper company—was that it?

A. Third avenue north.

Q. The paper company building?

A. Yes, sir.

Q. And the property adjoining that—

A. Yes, sir.

Q. —that is valuable business property?

A. It is used as warehouse property, valuable because there is a railroad track at its rear, more valuable on that account than if it were not there.

Q. It is adjacent to railroad property?

A. Not adjacent, but abuts a railroad property.

Q. In the rear?

A. Yes, sir.

Q. And is also near the business district?

A. Yes, sir, it is part of the business district, but not in the heart of the business district.

Q. It is not in the retail center, of course?

A. Nor in the wholesale—No, sir.

Q. Take this corner of First avenue and First street south, I think the Janney, Semple property.

A. One block from the union station.

Q. And it is in the heart of it or right in the wholesale district, isn't it?

A. It is in what we term the old wholesale district; they have grown from that to north Minneapolis.

Q. This block 40, Minneapolis, Second and Washington and Second and Third streets south, how far is that from say the heart of the retail district?

A. Well, the heart of the retail district of Minneapolis is Nicollet and Sixth street. That is six blocks from Washington and this is two blocks—eight blocks, I should say, from the heart of the retail district.

Q. And how far from the wholesale district?

A. It is from Janney-Semple's about three blocks. Janney-Semple's is located in what was once the wholesale district of Minneapolis; they are now the only concern left there—about two blocks from this, and I should say five or six blocks from the new wholesale district in north Minneapolis.

Q. What uses has that property now?

A. Largely retail goods, wet and dry, mostly wet.

Q. It is in a retail section?

A. Yes, sir, but every other store, nearly, is a saloon.

Q. And it is convenient to all the different business sections of the city, isn't it? That is, to the wholesale and to the retail and manufacturing sections?

A. Why, it is convenient of access, but it is considered third or fourth class retail property.

Q. But it is convenient of access to all these business districts?

A. There is no property within a mile but what is convenient of access.

Then for post-office purposes you might as well have
a mile away?

No, sir, the post-office is required to be such a distance
union station—not the union station, but from the rail-
station.

And this was within the particular distance from a
oad station?

Yes.

And also close to all the other business districts, the re-
and the wholesale?

It is eight blocks from the retail center.

And it was second or third-class retail property?

Third-class property.

And presumably bringing in a very good income?

Yes, I think the stores there would rent for $50 a month,
ething of that kind. Stores on Nicollet would rent for
a month, of the same size. It would rent for about ten
cent on a dollar of what other property would rent for.

This Center block, Second and Washington and Nicollet
Hennepin, how far is that from the heart of the retail dis-
?

That is six blocks from what we call the heart.

How near to the wholesale district?

It is about midway between the old and the new whole-
districts.

And what is the present use of that property?

Somewhat similar to Block 40, but better.

Then you would say second-class retail business?

Yes, sir.

Fairly well improved?

There has been no building built there—I had an office
ne block thirty-four years ago—I do not know of a building
ng been built there since then.

But there are buildings on the property?

A. Yes, sir, it is all covered.

Q. It is income property?

A. It is income property, every foot of it is built on, of some character or other. I would like to possibly correct my statement—Mr. Barney, you are on that commission, was it $470,000 your commission reported?

Mr. BARNEY: It was between $470,000 and $475,000.

Q. Now, you have spoken of certain property here being available for railroad purposes and for none other that was down under the bluff at the union station.

Mr. HOW: I don't think he said it was available for none other.

Mr. DURMENT: Perhaps I am wrong about that.

Q. But you have said that property across the street from the union station was not available for railroad purposes except at great expense.

A. That is true.

Q. That is under present conditions?

A. Under any conditions, unless the railroads should come in from other points of the city.

Q. Railroads could come in from other parts of the city, get across the river at other points?

A. Yes, sir.

Q. And taking that property as it was, perhaps when the railroad was built, so far as the natural lay of the country is concerned, it might be used for railroad purposes the same as that below the bluff, might it not?

A. Never, except with great expense. The roads come in especially from the east across the river, and reach the center of the city and when they reach the center they reach a point which topographically is twenty or thirty feet below grade.

Q. That is not true of all the roads?

A. No, it is not true with the Milwaukee or the Great Western, but the bulk of the roads come in that way.

Q. They do come in that way, and there is no doubt there are very good business reasons for doing so, but there is nothing in the topography of the country that would have prevented any of those roads, in the first instance, from crossing the river at a different point and coming in on a grade which would have enabled them to reach this property across the street from the union depot, was there?

A. No, sir. It is fair to assume they took the best way when they came in.

Q. They probably, I should say picked this particular way to get to the mills which were located adjacent to the water power?

(No answer).

Adjourned until the morning of September 29th.

FEDERAL BUILDING, St. Paul, Minn., September 29, 1908, the hearing was resumed at 10 o'clock A. M.

THOMAS COOPER,

recalled on behalf of Complainant, testified:

By Mr. How:

Q. You have heretofore testified at length in this case, Mr. Cooper?

A. Yes, sir.

Q. Have you read over your testimony since so testifying?

A. I have.

Q. Is there any correction in it that you would like to make?

A. I find that at the last hearing (the 13th day) on page 559—

Q. The last hearing at which you testified, you mean?

A. Yes, sir.

Q. We are up to about the thirtieth day now.

A. At page 559 I answered a question and my answer does not clearly set forth my meaning.

Q. Will you read the question?

A. The question is: "Q. At about page 241 of your testimony you seem to have in mind that the added percentage within the larger cities covers only cost of supposed improvements that might exist upon the property if it would have to be purchased to-day; are there any other elements or things cov ered by that added percentage excepting the cost of improvements?" to which I answered, "The added percentage covers more than improvements. It covers, and I think I have said this before, but I will be glad to say it again, it covers severance damage, improvements actually there, the cost of purchasing the property and the increased cost that a railroad company has to confront when it is purchasing property, as compared with an individual." That is the material part of the answer which I wish to correct. What I had in mind when I said "the increased cost that a railroad company has to confront when it is purchasing property" was the increased cost of improvements, not the increased cost of the real estate. In other words, what I was trying to say was that under the heading of "Market Value" as we so reported it to the State Commission, we included the real estate only; that is to say, what it would cost to purchase that real estate, reproduce it. Then in the column of Value for Railway Purposes or Right-of-Way Value, we increased the market value by a percentage which varied, to cover the cost of improvements, the cost of purchasing the property, the severance damage and other damages.

Q. All consequential damages?

A. All consequential damages. The division of market value (or segregation is a better word), the segregation in our report to the state commission of market value and value for railway purposes was a division made to comply with the

instructions of the State. It was an exceedingly difficult division to make, because of the difficulty in getting a clear understanding of just what the State required in that respect. The written instructions that they gave us said nothing about that; we did, however, talk with Morgan, engineer of the State, to try and find out from him just what the State desired, and our understanding of what was desired was that under the head of Market Value we should put what we considered would be the cost of reproducing the real estate, of purchasing the real estate to-day, without taking into account the value of improvements that we would have to pay for, the severance damage and other consequential damages. These last items constituted the difference between the market value and the value for railway purposes.

Q. You received, I think you have testified, the various reports of these various assistant commissions, I might call them, which you employed; I think you have testified that you discussed their valuations with them, and that thereafter you considered all the information and all the elements that you thought ought to bear upon the subject, and made your own valuation which was finally the result of your own judgment, and submitted a report to the state of Minnesota of the valuation of the real estate of the Northern Pacific Company in the state of Minnesota?

A. That is correct.

Q. I show you paper marked for identification Complainant's Ex. 29—Cooper, and I ask you what that is; that has been prepared by you?

A. That statement was prepared by me, and the first part of it is a copy of the report made by Messrs. Elwood, Barney and Ridgeway, of the value of the real estate owned by the Northern Pacific Railway Company in Minneapolis.

Mr. How: Which is identical, I think, with the first part of Complainant's Ex. 22—Elwood.

The MASTER: That is not in our hands, if it was offered in evidence regularly.

Mr. HOW: It was offered, but this will be offered, anyway.

A. The last part of the statement is a comparison of the valuation made by Messrs. Elwood, Barney and Ridgeway, with the valuation which I prepared and reported to the state of Minnesota. We are talking all the time now of market value, not value for railway purposes, the real estate men having been instructed to make up market value only and not the valuation for railway purposes. The statement is in detail, by districts; shows the square feet area the Company owned in each district and the valuation per square foot, and extended.

Q. You have not, in all cases, I think, followed the same method of description in the latter table as was followed in the report of Messrs. Elwood, Barney and Ridgeway?

A. There may be some slight variation, but I think the variation is rather in describing the streets, the limits of the districts differently. However, in order to identify each item on the real estate men's report with the comparison statement, we have numbered the items on both papers, so that each item can be readily identified.

Q. The method employed by the real estate experts was merely to assign a value per square foot of land owned by you between certain streets or between certain points?

A. That is correct. The real estate men were furnished with a set of our maps showing our ownership, which they divided into districts and made their valuations by districts, so that the reference on their reports, plat No. 1, plat No. 2, and so on, refers to the maps which we provided them showing our ownership.

Q. And the latter part of Complainant's Ex. 29, the comparative statement, applies those values per square foot to the actual number of square feet owned by the Company and car-

ries them out as a total valuation for the respective tracts valued?

A. That is correct. You will observe on the comparison statement one item included there which the real estate men did not value. That is explained by a foot-note. The reason why they did not value that is that it was overlooked on the maps that we furnished them as being Northern Pacific property, but in order to make the comparison complete we have included that item and have put their value in at the value I put on it. The item, however, only amounts to $3,067.50 in a total of over $4,000,000, therefore it may be considered as negligible.

Q. In what cases did you disagree with the judgment of the real estate experts employed to value your property in Minneapolis, with regard to what tracts?

A. I disagreed with them in one item only, being item 19, from Third avenue north to Plymouth avenue. That covers our freight terminal grounds at Minneapolis. The real estate men appraised that at $3 per square foot. I reduced it to $2.75 per square foot. Excepting that item I made no change, adopting their figures on everything else.

Q. Can you tell why you disagreed with them in that valuation?

A. Yes. I thought they were too high. I remember discussing that particular item, being as you will observe, the largest, and in value covering more than one-half of the total Minneapolis valuation; I discussed that item with the right-of-way commissioner of the Omaha; his company had property in that vicinity, and after discussing it with him I concluded to reduce it. I now feel that I should have rather accepted the judgment of the real estate men than allowed myself to be influenced by the Omaha right-of-way commissioner, I am satisfied *now* that the real estate men were right, and if I were doing it over again I should not change their valuation in that

item or in any other.

Mr. HOW: I offer this Complainant's Ex. 29.

Mr. DURMENT: We will object to it that it is incompetent, immaterial and no sufficient foundation has been laid for its reception in evidence.

The MASTER: Objection noted.

Q. I show you Complainant's Ex. 30—Cooper, which I think has been prepared by you, and ask you what that is.

A. That is a statement similar to the one that we have just described on the Minneapolis property, covering the St. Paul property. That is to say, the first part of it is a copy of the report made by the real estate men, Messrs. Taylor, Watson and Read, giving their valuation per square foot on the districts as described. It is followed then by a comparative statement of the valuations of the real estate men and the valuation which I prepared for the Railway Company, showing the districts, the area in square feet in each district, the valuation per square foot, an extension of that valuation, and then the same figures, value per square foot, and the extension of the same for the Railway Company's figures.

Q. This was prepared, at least your valuations were made (I think you have testified), after discussion with the St. Paul experts of their report and consideration of all other information and experience that you had had in the same way as the Minneapolis valuation made by you?

A. That is correct.

Q. There appear to be some radical differences in opinion between you and Messrs. Read, Watson and Taylor, with regard to valuation of some of these tracts situated within the limits of St. Paul; a great many items appear to be different; I think none prepared by you are larger than those prepared by them, but a number of them very radically smaller; that is the fact, is it not?

A. That is correct.

Q. What have you to say with regard to those differences?

A. When I received the report of the real estate appraisers, I went over it with a good deal of care, and it seemed to me that their figures in some instances were too high. I based that on purchases that I knew of that had been made, and principally on that, and I concluded to reduce some of the items as shown in the comparative statement. I feel now that I made a mistake. I am satisfied that their appraisals were conservative and much nearer the true situation as to the cost of reproducing the property than mine. That is somewhat of a confession to make, and I am not very proud of it, but it is the fact. I was carried away, as most of us are apt to be, by isolated transfers; that is to say, you will occasionally hear of a transfer at a price, or you may yourself make a purchase at a price, and you are apt to think that that establishes values in that locality, overlooking that when you have to purchase large areas, or such as those that we are now considering, you have to pay a price which is not represented by the isolated transfer, but a maximum price. There is quite a range of values—quite a range in the prices—that you have to pay when you are purchasing large tracts of property, ranging from the instance where the owner has to sell by stress of circumstances and does sell at a price perhaps below what everyone would consider its value; that is the extreme in one direction; the other extreme is where you have to purchase a piece of property that the owner does not want to sell, that he may have in use for one purpose or another, it may be a manufacturing enterprise that he has established and maintained there for years, its location known to his customers, giving it an added value to him, and when you come to acquire a piece of property of that kind you have to pay for all of those features, pay for them liberally, because the final adjudication of what you have to pay is necessarily a jury which is not going to favor the railway company as against the individual, but rather the reverse. Therefore,

in valuing property such as that of a railroad company, large tracts or large continuous strips, you must consider carefully this range in values that I speak of. The number of low-priced pieces that you will acquire will be very limited, and your price will finally result in very near the maximum that I have indicated. That fact, I am satisfied now, I did not take into consideration sufficiently when I was revising the figures of the real estate dealers. At that time (two years ago), I had occupied my present position about two years; I have now occupied it four years; my experience has been very much enlarged; I know a whole lot more now than I did two years ago about buying real estate for a railroad company, and I am satisfied, as I said before, that I made a mistake in reducing the figures of the real estate dealers and were I doing it over again I would not reduce them. That is a fair, frank explanation of why I did it.

Mr. DURMENT: We move to strike out the whole of that answer except the statement that the witness is satisfied he made a mistake, as being wholly irrelevant and immaterial and absurd.

The MASTER: The motion will be noted. Proceed. The Master will not rule on the motion, of course.

Mr. HOW: Will the Court preserve in the record the insolent remark of counsel that the statement is absurd?

Mr. DURMENT: Why, I intended it to go into the record.

The MASTER: The record, I suppose, shows for itself. Unless otherwise instructed, the Reporter is to put in everything that occurs here.

Mr. DURMENT: Perhaps instead of saying "absurd" I should say impertinent, using "impertinent" in the sense used in equity practice.

Mr. O'BRIEN: In support of Mr. Durment's motion to strike out, I desire to call attention to the fact that the witness in now revising his judgment has stated that he did so because he

now takes into consideration the amount which a railroad company usually is compelled to pay above the market value of real estate in order to acquire it; that, as applied to the value of the property of the Northern Pacific now owned by it, and which it never will have to acquire again, to take into consideration the probable action of juries, severance value or imaginary buildings, makes an estimate a mere absurdity, and that the sole reason which he has given for revising his figures has been that he originally omitted, in arriving at the market value, to take into consideration conditions which never have and never can exist with regard to this property; and those imaginary conditions not only include what I have already mentioned, but also what Mr. Cooper described in his original testimony as a sentimental value arising from the tears of women and matters of that sort.

Mr. How: What we are trying to establish is the value of the Northern Pacific Railway System as the base upon which we are entitled to a fair return, if we are entitled to anything. The supreme court, in the case of Smythe v. Ames, the utterance being by Mr. Justice Harlan, says that one of the elements to be considered is the present cost of construction of the property as it exists in operation for the public use. Some other courts have said that that was the sole element to be considered. Now, the present cost of construction of the Northern Pacific Railway may be established only, of course, by considering that the railway property does not now exist. In establishing the present cost of construction of the Railway, the first element, manifestly, is the cost of acquisition of the railway right-of-way; if no railway property now exists, manifestly the right-of-way must be first acquired, and the only method of computing the present cost of construction is to start upon the proposition that the property does not exist, because, if it does, you can't presently construct it. Now, that being the fact, we must, of course, establish the present cost of acquisition of the

railway property, not upon the hypothesis that the Indians infest St. Paul, but on the hypothesis of the present conditions of St. Paul and all other points of contact. In doing that, we assume that this right-of-way which the Northern Pacific now occupies in St. Paul is occupied in the manner that it would be probably occupied if the Railway Company were not there. We know of no other method. We do not think that the present cost of construction can be established by assuming that the property is in the same shape as it was in 1857, but we take probable conditions, based upon experience. Now, Mr. Cooper's testimony with regard to the cost of acquisition of this property is this: That the ultimate resource of a railway company is a condemnation proceeding. It has to have property; it has the power to get it *in invitam;* a condemnation proceeding is its ultimate resource. He knows, by experience, what he can afford to pay rather than to resort to condemnation proceedings. He knows by experience and it is not making any improper remark at all that a railway company does not get what railway people consider a fair show before juries, and I would as lief assert that in any company as here, and I am not afraid to say so, because it is the truth. He therefore starts as his market value upon the highest, fair purchasing or selling price of the property in question, eliminating all chance of competition; he has to take the property which the road now occupies, and what he is considering is the present cost of acquisition of that property under present conditions, with regard to all surrounding and adjacent property, and not upon the absurd conditions or suppositions that he had to take tepees instead of warehouses in a warehouse district. Now, I think it is perfectly clear what he meant by his answer. It is not impertinent. If his theory is wrong, the Master will find that it is wrong, and if he should have to put in evidence of what this property was worth when the Indians were here, then we shall have no case, because I shall not attempt to prove it.

Mr. DURMENT: Won't you prove the value of the tepees?

Mr. HOW: I will not.

Mr. DURMENT: I think we might just as well stop this case right now, then.

Mr. HOW: You can move to dismiss it upon that declaration; I shall not try to prove what this property would be worth if the Indians occupied it.

Mr. DURMENT: We will make our argument on the law of this proposition later, and reserve the right to do it at this time.

Mr. HOW: I thought you had made it. I was answering. Wasn't that intended to be an argument on the law?

The MASTER: The right is reserved. The Master will hear you later, if you desire.

Q. I hand the witness a paper marked for identification Compainant's Ex. 31—Cooper. What is that?

A. That is a copy of a letter from D. C. Morgan, engineer of the State Railroad Commission, addressed to the general manager of the Northern Pacific Railway Company, giving instructions as to how the Railway Company should make up the report of its valuation for the state.

Q. May I ask you to read the various headings, "General Plan for Estimating the Value of the Physical Real and Personal Properties of the Railway Companies in the State of Minnesota—Basis." I ask you to read the first two paragraphs of that into the record.

A. Under the heading "Basis" it reads, "In estimating the value of the physical real and personal properties of the Railway Companies in the state of Minnesota, an estimate of the cost of reproducing them new is deemed essential as the prime factor.

"In respect to real estate and construction, this prime estimate is to be made as though the existing railways were not constructed and that the regions through which they now extend

were occupied as now by the settlements, improvements and varied industries."

Q. Mr. Cooper, you have pursued, I think you have testified, the same method with regard to Duluth properties that you did with regard to St. Paul and Minneapolis properties?

A. That is correct. We had appraisers there, the same as we had in St. Paul and Minneapolis, and got a report from them.

Q. That report is in evidence in this case as Complainant's Ex. 21—Stryker. What differences exist between the valuations made by your appraisers in Duluth and those returned by you to the State upon Duluth properties?

A. I made no change; I adopted the real estate men's valuation in Duluth exactly as it was given by them.

Q. What is your present judgment, based upon your experience and your knowledge of real estate values, with regard to the possibility of acquiring the Northern Pacific terminal properties and right-of-way situate within the limits of St. Paul at the figures reported by you to the State of Minnesota as the value of those properties?

Mr. DURMENT: We object to that on this ground: That having called this witness to testify as to the values of these properties before, and he having been cross-examined and dismissed, it is not competent later to call him to impeach his own testimony given on the former occasion.

The MASTER: The objection is noted.

A. I do not believe it is possible to purchase these properties at the figures I reported to the State.

Q. If the Railway Company did not now exist and you intended to acquire them for railway use, I mean.

A. That, of course, follows.

Q. What is your judgment with regard to the same proposition within the limits of Minneapolis?

Mr. DURMENT: The same objection as to the last question.

A. The situation in Minneapolis is somewhat different. My best judgment is that the property in Minneapolis could be acquired for about the price that the real estate men turned in to me. In other words, had I adopted their figures, instead of cutting the one item as I have explained, I should feel that the estimate was about right. In that respect, Minneapolis differs decidedly from St. Paul. I feel that my figures on St. Paul are entirely too low, but not nearly so much so in Minneapolis.

Q. What is your view with regard to Duluth upon the same proposition?

A. Duluth, I think, is about right. There have been some decided developments in Duluth since I made up the figures; that is to say, the United States Steel Company has decided to put in a very large steel plant at Duluth; the Wisconsin Central is now running into Duluth, and the Soo is building a line into Duluth. Those things have given Duluth quite an impetus, and have stiffened values of real estate very decidedly. Therefore, if I were making the Duluth estimate to-day, it would be somewhat higher.

CROSS-EXAMINATION.

By Mr. DURMENT:

Q. I understand, Mr. Cooper, that in making what you have spoken of as your report to the State of the values of the properties in St. Paul, Minneapolis and Duluth, you had before you in making up those figures, in the case of each city, the appraisals or values fixed by the real estate men that you have referred to?

A. That is correct.

Q. And in every instance your values were made after you had had a chance to examine and consider those appraisals?

A. That is right.

Q. When was it that those appraisals were made?

A. They were all made in the months of September and October, 1906; the exact dates I can't give.

Q. And when did you make up your values and report them to the State?

A. I could not say just when the report was made up. The report which the company made to the State was a very voluminous one; my figures were a part of it; and my recollection now would be that I completed my report perhaps within two months after I got the real estate men's appraisals, but I am going on my recollection somewhat and cannot be exact about that.

Q. Then that would be on or before January 1, 1907, you probably completed your figures?

A. About that time, yes, sir.

Q. And in preparing for giving testimony in this case, before you were called some time during the present summer or the just-ended summer, you, of course, reviewed your figures somewhat?

A. I don't quite understand what you mean by reviewed.

Q. Well, you went through, and you didn't carry in your head all these values and figures, but when you were called, along in the summer of 1908, as a witness in this case by the Complainant, you produced statements or tables of values, and you testified yourself as to the values placed upon these various terminal properties in Minneapolis, St. Paul and Duluth?

A. That is right.

Q. And in doing that you of course had re-examined your figures which you had made up as a report to the State and also these valuations or appraisals made by the real estate men, had you not?

A. I did not.

Q. Oh, you did not consider them at all further?

A. No.

Q. You simply assumed they were right, and testified upon that basis?

A. I gave the matter no particular thought. It was one that I had handled and rather settled and dismissed, and I have got so blamed many things to keep a-going that this matter didn't seem to me to require any further consideration at that time, and I did not give it any.

Q. Then the matter of the real value of those terminals wasn't of any importance to you in this case?

A. I haven't said that.

Q. Well, that is the legitimate inference from your answer, as I take it.

A. I don't think it is.

Q. Now, you say that you were compelled to confess that your values as made by you and reported to the State and as testified by you on your former examination in this case as the values of these properties are too low in a number of instances—much too low. What is it that calls for that confession at this time, when you were not ready to make the confession two or three months ago when you were on the witness stand?

A. I was not called upon to make any confession two or three months ago upon the witness stand.

Q. Well, why—

A. Let me finish my answer, please.

Q. —called upon to make it at this time?

A. Let me finish my answer.

Mr. How: I am going to insist that the witness be not browbeaten; I ask that he be allowed to finish his answer.

A. The matter of this valuation—of my testimony in this case—I think I have explained before that the first valuation that we made of any kind was for the State of Minnesota. I was then called upon later to testify in what is known as the Spokane rate case. In that case I adopted the valuation for

Minnesota as reported to the State. The preparation of my testimony in the Spokane rate case, covering as it did, the entire System, was quite an undertaking. I had given, as I thought, all of the consideration that Minnesota required in making up my report to the State, and I did not give Minnesota any further consideration except to adopt those figures in the Spokane rate case. I practically followed that in the Minnesota rate case, and gave my testimony as it has appeared in this case. The matter of the St. Paul valuation, and the matter, in fact, of the valuation of all the large terminals, has been a subject of considerable discussion; it involved a large sum of money, and as the result of the discussion that I have had with our own officials, as the result of talking the matter over with real estate men, as the result of additional experience that I have had in buying property,—from all of these things, I have concluded that my valuation in St. Paul was too low. Now, the precise instant of time when I reached that conclusion I don't know that I can say; I have felt that, for some time back, and while it would be much more pleasant for me, personally, to stand by my figures as returned to the State, nevertheless I am assuming that, sitting in this chair, I am supposed to tell just exactly what the facts and the truth are, no matter how they may hurt my feelings or my reputation, and that is what I am trying to do. I am satisfied now, as I have said (and will repeat again), that my figures on St. Paul were too low, and I have tried to explain why I come to that conclusion.

Mr. How: I think he testified formerly, in both direct and cross, that they were too low.

Q. While it is a matter of humiliation, as you say, I suppose that the blow is somewhat softened by the fact that the revision takes them higher instead of lower?

Mr. How: I object to that question as insolent and wholly uncalled for.

Mr. Durment: Well, I submit that it is entirely proper.

The MASTER: I hardly feel like excluding it, if it is insisted on.

Mr. DURMENT: I think I will insist upon it. He has paraded here the fact that it was humiliating, but still he had to do it, from a sense of duty. Now we will find just how far his sense of duty humiliates him, that is all.

Mr. HOW: I object to the language of counsel as insolent and wholly uncalled for.

The MASTER: I hardly think that it is subject to that objection, Mr. How, to the extent that it should be excluded from the record. I think the witness should answer.

A. I will simply answer that my humiliation is not meas-used in any way by the results that may happen from the testimony that I give here. I am testifying, as nearly as I possibly can, to the facts, regardless of what the results may be.

Q. The facts, then, are these, are they not, Mr. Cooper: That, occupying the position you did with the Railroad Company, having had the experience that you testified on your former examination you had had; having been qualified as you testified on your former examination, you were qualified to testify as to the values of these lands; you had before you the reports of these appraisers as to all three cities, and considered them and revised them and made up what was your judgment of the value of those lands as early as the first of January, 1907, and put those values in a report to the State of Minnesota; about a year and a half later, in the summer of 1908, you were called as a witness in this case before this Master, and testified to those values as being, in your judgment, the correct values and as the value of those properties; at that time you made no suggestion that they were not right, that you were wrong, that you were not competent to testify as to the value of them or to value them; and now, within three months afterwards, you come in here and say because you have since talked with officers of the Railroad Company and with other real

estate men, you have concluded that your values were too low, and now come in and say you made a mistake and that on the St. Paul properties alone, your former valuation was too low by $1,735,000 and over?

Mr. HOW: That is objected to on the ground that it recites facts which are untrue; that it misstates the testimony. Mr. Cooper testified in his former examination that his figures were too low, and testified, as I remember it, again and again, that they were too low. I have called attention to that testimony, and counsel persists in misreciting the facts.

Mr. DURMENT: Well, I submit my question involves a fair statement of the facts in this case, from his own testimony.

The MASTER: I am not at all satisfied that it is quite in accordance with the evidence in this case, for I do remember distinctly that Mr. Cooper during the course of his testimony at various times was saying and said quite often that these valuations were too low, lower than he would make them if he were making them at the present time. Now, if the question embodies an incorrect statement of the testimony and the witness is apprised of that fact, of course, it is very easy for him to say whether it does conform to the facts as he regards it.

The question was read.

The MASTER: The question substantially is, as I understand it, are not these things, recited by counsel in the question, the fact? The witness may answer.

A. They are not the fact.

Q. What investigation, what examination have you made, as to the values of a single piece of property in St. Paul covered in your testimony today, your Ex. 30, since your last testimony, which gave you any information with reference to the character or actual value of that piece of property that you hadn't made when you were on the stand last before?

A. I have made no such investigation since I was last on the stand.

Q. Have you made any such investigation since you were last on the stand with reference to any piece of property covered by your Ex. 29, being properties in Minneapolis?

A. I am not sure if I understand that question correctly. The property in Ex. 29 the Company now owns; I don't know why I should or how I should go about making any investigation as to what price it could be purchased for, the Company already owning it.

Q. The simple question is, have you done so?

A. I have not done so.

Q. Now, will you please state to us what particular element, if any, you take into account in fixing your values as you testified to them to-day for the St. Paul property and the Minneapolis property, which you have not already testified on your former examination that you took into account when you gave testimony as to the values of these properties?

A. I tried to explain—

Q. Well, now, Mr. Cooper—

A. I am going on with my answer: I tried to explain in my testimony to-day how I made the mistake of changing the values of the real estate appraisers in St. Paul. I stated that I was carried away to some extent by isolated transfers of property, that I did not give sufficient weight to the fact that a railway company cannot purchase large tracts of land or continuous strips of right-of-way without paying a maximum price therefor. That is the element that I have now taken into account in reaching the conclusion that I made the mistake in cutting down the figures of the real estate men. That is the principal element.

Q. Don't you remember that upon your former examination as a witness in this case you gave as one reason for fixing your values that very fact?

A. I do remember; what I am now trying to say is that I did not give that very fact sufficient weight.

Q. Oh, then you don't claim that in fixing your values as you now say they should be you have introduced any new element to consider which you had not considered before, but that you conclude now in making up your mind formerly you didn't give sufficient weight to certain of those elements?

A. That is correct.

Q. Then there would be no change in your opinion as to the market value at that time, would there?

A. Yes, sir.

Q. Well, then, you would take that into account in arriving at the market value rather than at the railroad value?

A. The very element that we are discussing, of the difficulty and the increased price that has to be paid where you are purchasing a large amount of property for a railroad company, enters into market value entirely, and not into value for railroad purposes. The only thing that enters into value for railway purposes that a railway company would have to pay, of the character you indicate, would be an increased cost of the improvements beyond their value, but the market value includes the real estate, everything connected with the real estate excepting the severance damage and consequential damages of other characters and the value of the improvements.

Q. But you have claimed, all through, Mr. Cooper, as I understood you, that in making up the railroad value you had to add to the market value a certain price over and above the market value which the railroad company had to pay?

A. You have not understood me correctly then.

Q. And in certain cases, particularly outside of towns, you have said in your testimony, time and again, that the market value should be multiplied, sometimes by two and sometimes by three, to get at the railroad value or the right-of-way value, as we called it; and I understood you to say that as to property in St. Paul, in arriving at the value of it you took the market value, excluding any increase which would be

required because it was to be used for railroad purposes, and then you added this arbitrary amount to cover that increased value, that is, the increased price the railroad company would have to pay for it, as well as the cost of improvements which might be there. Isn't that right?

A. Well, your question states a number of different things; some of them are correct and some are not.

Q. Well now, let us have the question and we will find which are right and which are not.

WITNESS: Will you please read the question?

Mr. HOW: Some of them were true.

Question read.

A. The first part of the question, that I had testified that the market value had been increased in some cases three times is correct. The last part of the question, that I had testified that the market value did not include the increased price that a railroad company would have to pay, is not correct. The market value (I will again repeat) does include the increased price that the Railroad Company has to pay for the real estate; the difference between the market value and the value for railway purposes is made up of what the Railway Company will have to pay for the improvements, for the severance damage, for damages of other kinds, and the cost of purchasing the property.

Q. Then why did you, as I remember you did testify, that you instructed the real estate men to make a valuation of these properties without reference to any increased cost because they were to be acquired by or used for railroad purposes?

A. I have not testified to that.

Q. You have not? Then, as I understand you now, you mean to say that these values which you have heretofore made to the State as market values, and the market values which you now say should be made upon these properties include the additional amount which would have to be paid by a railroad company to purchase the property because it was being pur-

chased by a railroad company, over and above what would have to be paid for it if it were being bought for the ordinary industrial or business purposes; is that right?

A. The market value—

Mr. DURMENT: Now, I submit that that question can be answered by yes or no.

The MASTER: If the witness can answer it yes or no, it is proper to do so, and then make his explanation.

Mr. DURMENT: I will ask to have the question read again, and ask the witness to say yes or no to it and then explain.

Mr. HOW: You mean assuming that the property was vacant?

Mr. DURMENT: No, I mean just what the question says.

Mr. HOW: I can't understand it.

The question was read.

WITNESS: Am I obliged to answer yes or no, if it doesn't explain my meaning properly?

The MASTER: If the question can be answered by yes or no, it is proper for you to answer it yes or no and make your explanation; but if you deem it to be in such form that you cannot answer it either yes or no, it is proper for you to say so.

WITNESS: Yes, always keeping in mind that the market value does not include the elements that I have referred to above as being included in the difference between market value and value for railway purposes.

Q. Now, then, will you state again, right here in connection with this answer, what elements you mean "as referred to above?"

A. The various elements or items making up the difference between market value and value for railway purposes are improvements, severance damages, consequential damages, and the cost of purchasing the property.

Q. What do you mean by consequential damages? damages to other property not actually taken?

A. Yes, sir, that is one of the items.

Q. Well, what else is included in that?

A. Occasionally we have to condemn a piece of property that is being used for industrial purposes; there is a going business there. I say "condemn"—I should have said "either purchase or condemn." The value of the real estate is so much, the value of the improvements on it is so much, but there is a going business that is going to be put out of business, resulting in damage to the owner. That is a kind of damage that we must pay for.

Q. And those two classes are consequential damages?

A. Yes.

Q. Now, by cost of purchase, I understand you to mean what you have got to pay, in the way of commissions and expense of acquiring the property, for services?

A. That is right.

Q. Now, what do you understand market value to mean?

A. The words "market value," as we are using the term in this evidence, all come from the fact that the State of Minnesota in calling upon us to make out our report of the cost of reproducing the Northern Pacific System in the state, made up its blanks calling for two columns, one headed Market Value, the other Right-of-Way Value. In another part of the blank they call the right-of-way value "Value for Railway Purposes." That is where we get this segregation of market value and value for right-of-way purposes. It is not a division that I made, and I don't feel responsible for it. We tried to find out from the State just what it meant. Their instructions, which they gave us, said nothing about it. It being necessary, in order to fill out the blanks intelligently, to find out something about what it meant, I discussed the matter with Mr. Morgan, the engineer, got from him his ideas, and as the result of that discussion with him we made up our reports as to market value on the basis that I have tried to explain here over and

over again.

Q. You still haven't answered my question. My question is, what do you understand "market value" to mean in these valuations or reports which you have made up?

Mr. HOW: I submit he has answered it, at least five or six times, this forenoon.

Mr. DURMENT: Well, we will have it again.

The MASTER: The question is a little different than it was when asked before. If the witness understands, he may answer, if you desire.

A. The meaning of "market value" as we prepared our reports to the State of Minnesota, and as I have testified to it here, includes the cost of reproducing or purchasing the property, everything entering into it excepting the items of improvements, cost of purchasing the property, severance damage, and consequential damages.

Q. Do you understand it to mean anything other or different than what the property would sell for on the market at the time the valuation is made?

A. It has no reference whatever to selling property. It has reference to buying the property, reproducing it. I think I can perhaps explain this thing a little better, —

Q. Well, I would a little rather you would save your explanations for a while and answer my questions. You say that it has no reference to selling property but to buying property.

Mr. HOW: I suspected you didn't want an explanation.

Mr. DURMENT: Oh, well, I want what I am after, and I will get it before I am through.

Q. Then your values as made up and reported of the market value have no reference whatever, in your opinion, to the ordinary price for which the property would sell on the open market at the time the value was made?

A. They were made without any reference to selling prop-

erty at all; they were made with reference to buying property.

Q. Well, you mean to say that there is a difference between the price of buying property and the price of selling property, do you?

A. I don't understand that question.

Q. Well, I don't understand your answer.

A. Oh, yes, you understand my answer that I didn't understand it.

Mr. HOW: May I ask a question?

Mr. DURMENT: No, you may not, not until I am through.

Mr. HOW: I wanted to put you to a refusal.

Mr. DURMENT: Well, that is all right. I am willing to go on the record as refusing. You can't worry me that way.

Q. I understand that, in ordinary language, "market value" means the value or the price for which property will sell upon the market, or the price which will be obtained or can be obtained for the property if you put it upon the market for sale, at the particular place where the property is and the particular time when you want to fix the market value of it.

Mr. HOW: That is objected to as an incorrect statement of the law, and being unfair to the witness.

The MASTER: He says that is what he understands in regard to market value. He may finish his question.

Q. Now, then, do you understand that is market value, or something different?

A. I understand it is something entirely different in the sense that we are using the words "market value" in my testimony and in this report.

Q. Now, in what respect does "market value" as you use it in this report and in your testimony here as to market value differ from market value as I have said I understand it?

A. I have never made any study of the meaning of the words "market value," excepting as we are using the words market value in this report. I have explained fully, I think,

what we meant by market value in this report. Now, I am not prepared to go into explanation of what other kind of market value is, I don't know much about it.

Q. Then as I understand it, the market value as you use it in this report, has no reference whatever to the price for which property, or this property, would sell upon the market at the time you made the valuation?

Mr. HOW: Sell for what purpose?

Mr. DURMENT: Well, for any ordinary purpose.

Mr. HOW: Railway purposes?

Mr. DURMENT: Well, I will include railway purposes or exclude it. I mean sell for.

Mr. HOW: It makes all the difference in the world.

Mr. DURMENT: Well, it may or may not.

A. In making up this report, and in all the consideration that I have given to this subject, I have never taken into consideration anything about what this property would *sell* for.

Q. Either for railroad purposes or any other purpose?

A. Well, for railroad purposes, that would be different.

Q. Well, for any other than railroad purposes?

A. For railroad purposes, I think (and I think I have testified as to that), if a railroad company wanted to build a line to the Pacific coast, occupying the same territory as the Northern Pacific System, that they would gladly pay the valuation that I have put on it.

Q. But you haven't taken into consideration at all what the property would sell for for any other than railroad purposes?

A. No, sir, not at all.

Q. Have you, in arriving at these values which you have testified to as market values and reported to the State as market values and which you say now should be the market values, taken into consideration in fixing those values what a person desiring to buy these properties for purposes other than rail-

use, or purposes other than that for which they are used , would have to pay for them provided they were not now se for railroad purposes?

. Oh, yes; that is one of the elements that necessarily had e considered, as to what the property is being bought and for in the open market, in arriving at the market value, rriving at what it would cost us to go out and purchase of this property; we had to consider that as one of the nents.

. But you don't mean to say, as I understand it, that a on who wished to buy this property which you have valued for other than railroad purposes would have to pay for e prices which you have fixed in your testimony as market es, provided the property was not in use for railroad pur-s, do you?

. If the person wanted to buy all of that property and to have it, as the Railroad Company had to have it, he would bably have to pay just as much as we have valued it for, use that is the theory on which our valuation is made.

. But if it were to be sold in parcels, such as is used for nary businesses, would they have to pay the same prices, our opinion, as you have fixed as the market value in your imony and in these reports?

. Well, for some parcels they might have to pay as high ve have it fixed, for some less. They would have a choice, ever, and would undoubtedly take the cheaper ones.

. Then, if that be true, how is it that you have included our market values (as you have testified you have) the in-sed price which the Railroad would have to pay for perty to acquire it for railroad purposes, over and above t would have to be paid if it were being acquired for ordi-y business or industrial purposes?

. Because the theory on which the report is made up as he column of Market Value was to include everything con-

nected with the cost of reproducing the property excepting the particular items which I have explained above were eliminated, to-wit, improvements, severance damage, cost of purchasing the property, and consequential damages.

Recess until 2 P. M.

AFTERNOON SESSION.

Q. I don't want to seem to be needlessly repeating, but I am not quite certain that I have a clear idea of what you mean, Mr. Cooper, or what you understood market values as given by you in your testimony and in your report to the State to mean. You said that you did take into consideration the prices which other persons would have to pay for the property if it were not already used for railroad property and they were seeking to buy it for business purposes, but that that was only one element which you took into consideration, as I understand it?

A. That is right.

Q. And it seems to me, then, that the term market value as used by you in your testimony and your report made to the State, was used in the sense of what you considered the true or actual value, excluding from that, however, the particular matters which you added to make up railroad value, such as severance damage and improvements which probably would be there and consequential damages and cost of purchase.

A. That is very near correct, excepting that the price which a railroad company has to pay for property, I don't mean for each individual purchase, but in the aggregate, exceeds what is generally considered to be its market value, using the words "market" value in the ordinary sense, not in the special sense used in the report to the Minnesota Commission.

Q. Then, market value, as used in the report to the Commission and your testimony, means the true value for railroad purposes, excluding those matters of improvements and

severance damages and consequential damages and cost of purchase, and would not be synonymous with the ordinary market value of the property for general purposes?

A. It means what the Railroad Company would have to pay for the property.

Q. And that, ordinarily, in the average, would exceed the price that others would have to pay for it, buying it for ordinary business purposes?

A. That is right.

Q. And that is what you would term its actual or true value, I suppose, rather than the market value?

A. The word "value" doesn't seem to me to fit this case, because all the time we are figuring on the cost of reproducing this property, and our instructions from the State used the word "reproduce." Now, if a railroad company could buy property at what is generally considered its value, the word "value" would fit in all right, but there is this excess which a railroad company has to pay beyond what is generally accepted to be its value which increases the cost of reproducing a railroad property.

Q. And this excess which you now speak of is included in your market values as reported to the State and used in your testimony?

A. That is right.

Q. Your testimony given at the former hearings with reference to the market values and the right-of-way values as reported to the State of Minnesota, were values as of about the first of January, 1907, as I remember it?

A. Yes, sir; that is the time the report was made up.

Q. Now, I understand your testimony given to-day as to those market values and right-of-way values refers to the same period, as of about January 1, 1907?

A. Yes; there has been a little stiffening in values in St. Paul, but I wouldn't think it would materially affect these

large totals that we are dealing with.

Q. You have said that after receiving Mr. Morgan's letter you had some conferences or discussions with him as to what was meant or understood by the terms "market value" and "railroad value." When did you have those discussions and where?

A. My recollection is that there was a conference held in my office of the different officials of the different railroads charged with the duty of making up the real estate valuations for the State report, and at that conference we discussed what the State intended us to put in the columns Market Value and Value for Railway Purposes. I think I telephoned right from my office, while that meeting was in progress, to Mr. Morgan and talked with him over the telephone, and when I got through talking with him I told the gentlemen the gist of our conversation over the telephone.

Q. Mr. Morgan was not present at that conference, was he?

A. I don't think so; otherwise, my recollection is entirely at fault about my telephoning to him.

Q. Was he invited to be present?

A. I couldn't say as to that.

Q. That is the meeting, as I remember it, at which it was agreed that it would be fair (that is, agreed between the railroad officials then present), that it would be fair, in making this report to the State, to take what you have spoken of as the market value here and, for terminal or inside property, add to it for severance damage and other things you have suggested a reasonable amount, no fixed percentage could be determined for terminal property in large cities like St. Paul, but that in the rural districts and in the small towns it would be fair to take what you term the market value and multiply it by 3 to arrive at the value for right-of-way purposes, is it not?

A. There were two or three conferences held with the railroad officials considering this question, and I can't remember

now just what was decided to be done at each meeting we held. I remember the final results, which were that we tried to get from the State their instructions as to the meaning of market value and value for railway purposes, and that we discussed among ourselves, having got that definition, what we should include for the severance damage in the towns and in the villages and the country and the cities. There was no agreement between the railroad companies what they would use; it was more in the nature of an exchange of ideas, and each company was at liberty to do just as it pleased about what it should put in. At one of those meetings we agreed upon the employment of the real estate appraisers, but, as I say, there were several meetings, and I could not tell what particular thing was done at each, and really I couldn't say but what Mr. Morgan may have been present at one of those meetings, it is so long ago that I have forgotten.

Q. Well, I understand he was not. Well, now, does the term "market value" as you have used it in making this report to the State and in your testimony here, have the same meaning, or is it used in the same sense with reference to the values you have fixed and reported to the State for properties on the right-of-way outside of the terminals and outside of the larger cities?

A. Oh, yes.

Q. As in the cities here?

A. Yes; the same rule was applied all through in the Minnesota valuations.

Q. Then, in arriving at the valuation of the right-of-way, the market value, as you have termed it, or as it has been termed in the report to the State and the testimony here, of the right-of-way through the rural districts, where you have used the multiple of 3, you have taken as the market value what in your opinion it would cost the road to purchase the right-of-way, have you?

A. Yes, sir.

Q. And then you have multiplied that by 3?

A. Yes.

Q. For the purpose of severance damage and consequential damages only?

A. Yes.

Q. Then you have included in your market value as to this rural property (right-of-way through the country districts) what on your former testimony was sometimes termed by you and sometimes by me as "hold-up" which the Railroad Company had to pay, have you?

A. Yes, sir, in the market value we included everything excepting the severance damages, the consequential damages and the improvements and the cost of buying the property. That rule was applied everywhere in the state.

Q. And you now say that in making up those values—market value and right-of-way value, as you reported it to the State and as you have testified to it here—you took for the market value what in your opinion it would cost the Railroad Company to purchase the property for railway purposes, including in it any excess it would have to pay over and above what any ordinary purchaser would have to pay if he bought the property for other purposes and then added twice that amount for severance damages and the cost of purchasing the property?

Mr. HOW: And improvements?

Mr. DURMENT: And improvements.

Mr. HOW: And other consequential damages.

Mr. DURMENT: And other consequential damages.

A. I did not use the same multiple throughout. You will find that the highest sum I used was multiplying by 3 and the lowest, I think, was adding two per cent. Not 200 per cent, two per cent.

Q. You didn't use as low as two per cent through the coun-

try districts?

A. Oh, no, not at all.

Q. You used as low as two per cent at the terminals?

A. That is right.

Q. I am talking now of the country districts, outside of the terminals and the larger places.

A. That is right. The multiplier of 3 was used almost universally, I think, in the country and in the smaller villages.

Q. Yes, but what I am getting at now is, that in making up your reports here you took, under what you have termed "market value" in those reports, what in your opinion it would cost the Road to buy that property for railroad purposes, which included not only the amount a person would have to pay if he bought it for ordinary purposes, but the excess which a railroad company would have to pay buying it for railroad purposes, and then, to cover severance damage, consequential damages and the cost of purchase, you added twice that amount to it?

A. And improvements.

Q. Yes, and improvements.

A. Yes.

Q. In Ex. 30 I notice immediately following your item 22 this item starred, "Folwell street to city limits." I notice at the bottom of it, in explanation of that star, "This was not appraised by Messrs. Read, Watson and Taylor, but is included in this statement at same price as returned by Railway Company, in order to make this statement complete." Now, I find that under the head of "Valuation by Read, Watson and Taylor," instead of having the valuation returned by the Railway Company you have it $52,620, and under the head of "Valuation by Railway Company," $35,080. I don't quite understand the note in view of the difference in the figures. Will you explain it?

A. Well, the explanation is that that is a mistake in the

report. It should, of course, in order to agree with the notation, have been put in at the same price per square foot. That is obvious. Now, what was done was this: Item 18, from Prior avenue to Folwell, that was the adjoining district, and in making up this statement we inadvertently put that item commencing at Folwell and going to the city limits at the same price. I am explaining now the mistake; that is how it happened. It is a mistake, pure and simple, which originated (not the mistake, but the omission by Messrs. Read, Watson and Taylor) it was not shown on the maps we furnished them; that is the reason they didn't include it, and being a comparatively small item we didn't go back and ask them to appraise it, and I put it in, but it should obviously have been put in at ten cents, in order to agree with my notation.

Q. In order to agree with the note at the bottom?

A. Yes.

FRED E. BARNEY,

sworn on behalf of Complainant, testified:

By Mr. How:

Q. Mr. Barney, will you state your name, your age and your residence?

A. Fred E. Barney, age 48, residence Minneapolis, Minnesota.

Q. What is your present occupation?

A. Real estate, loans and insurance.

Q. How long have you been in that occupation?

A. A little over 20 years.

Q. And where?

A. At Minneapolis, Minnesota.

Q. During the entire time?

A. Yes, sir.

Q. What has been the nature of your real estate business?

A. Oh, a general real estate business, buying and selling, handling on commission and as owner.

Q. And making mortgage loans?

A. Yes, sir.

Q. Has it been a part of your duty to make valuations in making mortgage loans?

A. Yes, sir, I have always made valuations for the loans I have made, which is a considerable part of my business.

Q. Have you had any experience in making valuations outside of your business as a real estate broker?

A. Yes, sir.

Q. What has that been?

A. For the past seven or eight years, about half of the time, I should say at least four years in that, I have been on the valuation committee of the real estate board at Minneapolis; I have also been employed by outside parties, like the University of Minnesota, and in several cases in railroad actions and park board proceedings in condemnation.

Q. As an expert witness in some cases?

A. In some cases, and in some as one of the board of commissioners or appraisers.

Q. You served as one of the commission to make a valuation of the railway properties within the limits of the city of Minneapolis, I think?

A. Yes, sir.

Q. Together with Mr. Elwood and Mr. Ridgeway?

A. Yes, sir.

Q. Who employed you for that purpose? Whom did you deal directly with in the matter?

A. With Mr. Elwood.

Q. And you undertook the matter and went through with it to the time of submitting a joint report of the three commissioners?

A. Yes, sir.

Q. Were you advised, at any time during the time that you were at work upon that valuation, what the purpose of the valuation was?

A. No, sir.

Q. Were you advised whether or not it would be better and more desirable on the part of the Railway Company to have a high or a low valuation?

A. No, sir.

Q. Will you state in general what method you pursued in arriving at the figures which were finally put into your report?

A. We first took the plats of the different roads, one at a time—

Q. You may as well confine yourself to the Northern Pacific case.

A. We took the plat as submitted to us of the Northern Pacific properties, and where we were not familiar with all parts of the property we investigated on the ground, in several cases, and put a price per square foot of what we thought was a fair value of those properties, dividing them in parts or sections as we could make the valuation to good advantage; or, where the price of a certain section would put a price on, our best judgment and belief to the best advantage.

Q. At fairly equal values?

A. Fairly equal; although I presume it was the case, especially in outlying districts, that the one end would be worth less than the other, but we put an average price, although we didn't cover very much territory in such cases, not so but what we could get an average figure.

Q. Did you take into consideration, in making your valuations, any transfers of property similarly situated, if there were any?

A. Yes, sir.

Q. Do you keep advised, in your business, of such transfers and the consideration for them?

A. As nearly as I can.

Q. Do you remember how much time you took in making the valuations?

A. It was from six to eight weeks; we worked at it at odd times.

Q. I show you Complainant's Ex. 22—Elwood, and ask you if that is your signature.

A. It is.

Q. And I ask you if that is the report that you made of the valuations of the Northern Pacific properties.

A. It is.

Q. About when was that report submitted finally?

A. About the middle of February, 1907, the papers were signed.

Q. When that report was submitted, what did those figures represent in your judgment?

A. In my judgment they were a fair value for those properties, taking into consideration all the elements which we use in making an appraisement.

Q. Did you consider, in making your valuation, the property as improved in any way and include anything for such improvements?

A. No, sir.

Q. You did not consider the property as improved by a railroad or as improved for other purposes, but you took the land on the theory that it was vacant land and needed for railway purposes, I take it?

A. That is it.

Q. In making a valuation of a continuous tract like the Northern Pacific properties in Minneapolis, what effect would it have upon your judgment that a certain lot, several blocks from the railway track had sold for a certain figure?

Mr. DURMENT: That is objected to as immaterial.

The MASTER: Objection noted. He may answer.

A. It was an incident, one of the factors of small consideration, but also, nevertheless, was taken into consideration.

Q. Did you have some examples in your mind at the time?

A. Yes, sir, many.

Q. And considered them?

A. Yes, sir.

Q. Do these figures represent, Mr. Barney, the price at which you think you could purchase the Northern Pacific continuous right-of-way as it then existed and now exists in case the property was needed for railway purposes and was vacant and unoccupied?

A. It does.

Q. You think you could get the property for those figures?

A. I think there is some of that property which could not be procured at the figures which we made; a good share of it I think could.

Q. How about the aggregate amount?

A. I think it is a serious question if it could be secured for that valuation.

Q. If you were the owner of any portion of that property, and it were vacant and were needed by the Railway Company for railroad purposes, do you think that you ought to obtain from the Company at least the valuation that you put upon the property?

Mr. DURMENT: We object to that as wholly incompetent and immaterial.

The MASTER: Objection noted. He may answer.

A. I think that I would be perfectly willing to sell the property, if I owned it, in that, for the figures which I gave.

Q. And you think that the Railroad Company ought to be expected to pay those figures, as I understand it?

Mr. HOW: I think he has so testified.

Mr. DURMENT: I don't think he has.

The MASTER: Objection noted.

Mr. DURMENT: And I object to that as being incompetent and immaterial.

The MASTER: Objection noted.

A. I think it is as low a figure as it could be acquired for; perhaps a little higher than they ought to be expected to pay, as between a perfectly fair purchaser and seller, in some cases; small.

Q. Which of the properties, which localities, if any, in Minneapolis, are you more familiar with than with others, considering the valuations?

A. With the property on the east side of the river more especially, as my business is on that side and I make more of a specialty of property on the east side of the river.

Q. On Complainant's Ex. 29—Cooper,—perhaps if you say which numbered plats are on the east side of the river.

A. Plat No. 1; No. 5 in plat No. 2; plat No. 3; plat No. 4; plat No. 5; plat No. 6; plat No. 7; numbers 24, 25 and 26 in plat No. 8; and plat No. 9.

Q. What is your judgment with regard to the question as to whether or not since the time this report was signed and submitted the values of the properties covered by it have increased or decreased?

A. There are some of the locations where it has increased, and some of them are in about the same condition as at that time.

Q. In what locations generally do you think the value has increased?

A. In that part of their properties between about 26th Avenue Southeast and the river, on the east side.

Q. On the east side?

A. Running along the university campus and below there, and a part of that (I think they have only one track in the street there) between Eighth avenue and about 14th avenue northeast. On the west side of the river, I think what they

have there is mainly right down in the business part of town, and I think that would be considered more valuable to-day than it was twenty months ago.

Q. What is your judgment with regard to the total valuation that you have placed in that report, as to whether it ought to be higher or lower to-day than at the time you made your report?

A. I think a fair value of it would show it a little higher than it was at that time.

CROSS-EXAMINATION.

By Mr. DURMENT:

Q. That is, that there has been a steady growth in Minneapolis for the past twenty months and in the business of Minneapolis which has caused some increase generally in property values?

A. I think so, yes, sir.

Q. There is nothing special with reference to this property which would increase its value over other property in Minneapolis near it or of similar character?

A. No, sir.

Q. It is true, I suppose, that in a growing city like Minneapolis there is, at least during a period of years, on the whole, an increase in values of desirable property, either business or residence?

A. Generally speaking, yes.

Q. There are periods of depression, of course,—

A. Yes, sir.

Q. —when it is the reverse. Is it not true, also, that with much property, at least, the fact that a railroad is locaed along or near to it, so that there is access to the railway from it, increases the value of the property?

A. Yes, sir; I might say, generally speaking, there are cer-

tain districts which it runs through to which that would not apply.

Q. What classes of property, for instance?

A. Well, a part of that which I spoke of between Oak street and the river, along the university campus; that property would be worth more if the Northern Pacific were not there.

Q. That is a residence district?

A. Yes, sir.

Q. A good residence district?

A. Yes, sir.

Q. And right at the university, where a railroad and passing trains are something of a nuisance?

A. Yes, sir.

Q. But that is not the general rule as to property?

A. No, I think generally the railroad is a help to the value of property.

Q. That is particularly true as to the termini of railroads, and business property conveniently situated with reference to the terminals, is it not, that it increases the value of those properties?

A. That as well as their outlying properties where it can be used for manufacturing.

Q. You said that the fact that a single lot several blocks away from the right-of-way of a railroad sold for a certain price would be a thing to be considered in arriving at the value of the railroad property, but of small moment, perhaps?

A. Yes, sir, I believe that is right.

Q. But I suppose if there had been many sales of separate lots within one or two or three or four blocks of the right-of-way of the Railway Company in the course of a year or two or three, the prices at which those different lots were sold would be a factor of considerable importance, wouldn't it, in determining the value of the railway property?

A. Each sale, of course, has its bearing.

Q. And, ordinarily, if there were a thousand such sales, that would have a very much greater bearing than a single sale in the same length of time?

A. Yes, sir.

Q. Now, I understand you to have said that the prices which you fixed in this report were, on the whole, those for which the Railroad could probably acquire the property for railroad purposes; there may be some instances where they would have to pay more, and some where they would not have to pay so much; is that right?

A. I think in a good share of it it could be acquired at the figures or near the figures which we put the valuation at.

Q. Of course, if you advertised in the newspapers and otherwise, that the Northern Pacific had to have a certain lot of property for a right-of-way through Minneapolis, and would go out to buy it having advertised that fact, and to buy it within a few months, the prices would jump, perhaps, beyond what you fixed them at, wouldn't they?

A. They certainly would. They certainly would.

Q. But it has been testified here that it would take about ten years to build this railroad, and assuming that the Northern Pacific had a reasonable time in which to acquire these properties and that it was not bound to take these particular properties, but could select other desirable routes into Minneapolis, would it not, in your judgment, be able to acquire these properties for about the price in the aggregate that you have fixed on them?

Mr. How: That is objected to as not based upon the evidence and not based upon any proper supposition with regard to the evidence or the law of the case. The Northern Pacific is not testifying here or seeking to prove what it would cost to buy at this time some right-of-way or other into the city of Minneapolis, but the right-of-way which it now uses, and testimony with regard to what it would cost to buy other property

I consider is immaterial to the case, wholly so.

The MASTER: Objection noted. You may answer.

A. I don't know as regards their values of other properties. That is, our report did not cover other properties, buying those, but *this* property I think would be a very good purchase if they were able to purchase it at this price, this valuation.

Q. I haven't asked you as to the values of other property.

A. I thought you said or other—

Q. You have testified, and I think in accordance with a well recognized fact, that if it were known that the Northern Pacific Railway Company had to have this particular property for its right-of-way and that it had to buy it within a comparatively short time, the price would go away beyond the figures you fixed upon it.

A. Yes, sir.

Q. Now, the question I ask is, that if, instead of those conditions, it were known that the Northern Pacific Railway Company was not compelled to have that particular property, but was at liberty to take that or any other right-of-way it might select, and had a reasonable time in which to negotiate for and to buy the property and pick it up, it wouldn't be able, in your opinion, to acquire the property it now has under those circumstances, in the aggregate, for the prices you have fixed on it?

A. I think it is a serious question if they could.

Q. You are not prepared to say they could not?

A. Why, it is only a matter of judgment on my part. I think it is a serious question if they could; I hardly think they could.

Q. And yet I understood you to say you fixed a price at which you thought it could buy the property when you fixed the valuations on it?

A. What we thought was a fair price for it to pay.

Q. Then in your opinion, unless they were in a position

where they could be held up, this is a fair price for the property?

A. If they are in a position so they could not be held up, I think it would be a fair figure, in the aggregate.

Q. And is it not true that in fixing these values you have considered and taken in account the fact, as claimed by the railroads, that when they come to buy property for railway purposes they have to pay beyond what other people would have to pay for it buying for ordinary business purposes?

A. No, I considered that they were in the same position as any person, firm or corporation, in buying a tract similarly situated.

Q. Well, did you assume that your value as to these various tracts was to be based upon the fact that the Railroad Company, or another purchaser, in acquiring this property would have to acquire this whole tract shown upon the plats?

A. Yes, we took it as a whole.

Q. And you consider, do you, that if one has to go out and purchase property of that character in large tracts, they will have to pay higher prices for it than if they would buy it here and there, a little at a time, in smaller tracts?

A. Very much higher.

Q. Very much higher?

A. Yes, sir.

Q. Then these values you have fixed here are very much higher values than you fixed upon the property or upon adjacent property which would be sold in single lots or a lot here and a lot there?

A. Certainly.

Q. And the values you have fixed here, then, are not the ordinary market values such as would be understood to be market values for adjacent property which was held by different owners to be sold in lots?

A. That is so; I think I could explain the situation there,

in a few words.

Q. Well, I would rather you would explain it a little later, Mr. Barney, if you will.

Mr. HOW: I will give you an opportunity.

Mr. DURMENT: Mr. How has a right to call for explanations.

Q. Now, you have already said that it is true, ordinarily, that the fact that a railroad exists along or near the property so that it may be used for manufacturing purposes or warehouse purposes, or for other business purposes needing railway facilities, increases the value of the adjacent property?

A. Generally speaking, yes.

Q. And, ordinarily, property adjacent to railways which may be used for manufacturing and other business purposes needing a railway, is of considerably greater value than if it had no railway near it or was not easily accessible to a railway, isn't it?

A. I think generally that is so.

Q. And it is true, is it not, that a large part of the property included in this report made by you and Mr. Elwood and Mr. Ridgeway,—the property adjacent to the railway—is of very considerably greater value than it would be if the railway were not there?

A. I think that is the case in a majority of the property.

Q. And would bring a greater price on the market?

A. Yes, sir.

Q. Owing to that fact?

A. Yes, sir.

Q. And yet, in fixing your values of this right-of-way of the Northern Pacific railroad, you have fixed them at values considerably in excess of the value of adjacent properties; that is, what would be the market value of adjacent properties held by many owners to be sold out by each in separate lots?

A. Well, we fixed them higher than certain lots have sold for, not higher than other lots are held at, generally speaking,

I think.

Q. Yes, but you said, a few minutes ago, that you had fixed the values of these properties in the right-of-way because you proceeded upon the theory that the Railway Company was to acquire it as a large and entire tract, at a considerably higher figure than you would have valued property at of like character which was to be sold in separate lots; and I understood you to say that you had fixed it at higher prices than you fixed for adjacent properties at the time you made this valuation which were to be sold in separate lots instead of in large tracts?

A. I presume I did; I think it should be some higher. My impression was that your question before was higher than other property would sell for near there (separate lots) or had sold for. In that case, there is more difference than we put the value of those lots at.

Q. That is to say, if you should consider the market value as evidenced by sales that had been made, and not evidenced by holding price, then your values of the Railway properties were very considerably greater per square foot than they would be for these separate properties?

A. In some instances.

Q. I understood you to say that you took into consideration all the matters or elements which would ordinarily be taken into consideration in arriving at the value of property in making this appraisal?

A. Yes, sir.

Q. And that would include, I suppose, ordinarily, the use to which the property was capable of being put?

A. Certainly.

Q. The greater the uses the higher the value ordinarily; that is, the greater number of possible uses it could be put to, the higher the value ordinarily?

A. That is so.

Q. Now, did the fact that this property was suitable for

railway purposes and its suitability had been demonstrated by its actual use, in your opinion, add to its value over and above adjacent property, that is, make it of greater value than adjacent property?

A. I don't know that it did of that immediately adjacent that could be used in the same way, for the same purpose.

Q. But it would increase its value, and I suppose did, in this estimate, over property two blocks away, say, or three?

A. If it was not capable of being used in the same way, yes.

Q. Well, now, what do you mean by "capable of being used in the same way"—that it wasn't so located that this particular road coming into this particular depot could make use of it?

A. No; that any road or person or corporation could use it in a similar way.

Q. Well, isn't it true that the greater part of the property within ten blocks of the extreme limit in any direction of the property you have valued in this case, could be used for railway purposes, building into the city from some direction?

A. No, sir, that is not a fact.

Q. Not a fact?

A. No, sir.

Q. Now, what parts of it could not be so used?

A. Ten blocks covers quite a strip.

Q. Yes, that is the reason I used the term.

A. There is the river, for one thing, which would cover four-fifths of the whole.

Q. Well, I didn't mean to include the water in the river nor the river banks immediately between, but I mean ten blocks of land excluding water.

A. Well, then, though I may be mistaken as regards the law in the matter, there is nearly a mile that belongs to the State. My answer is on the supposition that you could not take it from the State.

Mr. HOW: You are pretty safe.

WITNESS: Well, I thought I might be mistaken.

Mr. DURMENT: Well, I don't know; I have about concluded that a railroad can take anything in the State it wants; I may be wrong.

Mr. HOW: If we can walk off with enough for breakfast we will do well.

WITNESS: Then, in the business part of town, I presume they could take the property, but you take ten blocks of most any other place that they would go from where they are, the property they had would be so expensive that I shouldn't think it would be possible, or, at least probable, that they could take it.

Q. That is, it would not be profitable to take it, at any rate?

A. Well, I don't know about that. In further answer to that, I don't know what the law is as between one road and another, but this property had roads extending along near it which I suppose they couldn't take from each other.

Mr. HOW: You are safe in that.

WITNESS: I am not familiar with the law in that matter.

Mr. HOW: You are safe on that supposition.

Mr. DURMENT: Well, if you ever own a railroad and don't want the other railroad to take it, don't rely upon your assumption too strongly, you might get left.

Q. In making the appraisal or fixing these values you have fixed here, did you consider the value of the property which you appraised as if this Railroad wasn't on it at all, as if it were not being used for railroad purposes?

A. We tried to assume that, and in my own mind I will admit it was easier to really assume that a railroad was coming right along beside that and taking a similar piece, with the land as it is now, which I thought was a fair way to look at it.

Q. That is, taking a right-of-way adjacent to this property for another railway, the existing railway to continue as it

now is?

A. I took that into consideration, myself, yes.

Q. Then you gave to this property as you appraised it at least the added value it had because it was contiguous to other existing railways?

A. I don't know as I would say just that, because where it runs, in most all cases in the city, there are railroads contiguous to it anyway, and not taking into consideration especially the Northern Pacific any more than those others that are there, we tried to eliminate the matter of the railroad being there, and that we were appraising just that land; but, as I say, to my mind, often I would say, "Well, now what could a person buy a piece alongside of this for?" or which would be the same as the Northern Pacific buying alongside of the Omaha, the Chicago Great Western, or the Great Northern, as they are so intermingled on the east side there, the way they run,—they run close together.

Q. Well, that is what I understand: that, in arriving at this value, you tried to assume that the Northern Pacific road was not occupying this property and you were not adding anything to its value because of the fact that the Northern Pacific occupied it?

A. No, I didn't intend to.

Q. But you did intend to include in that value, and, in fact, so far as you made the value, did include in it, the value of the property as it stood with the other railroads adjacent to it?

A. Well, where they were adjacent to it, yes.

Q. Yes, where they were adjacent to it, of course?

A. Yes.

Q. If there wasn't any adjacent to it, of course, you would not?

A. No.

Q. That is to say, that you didn't assume, in arriving at

your value here, that there were no railroads in the immediate vicinity of this property?

A. No, sir.

RE-DIRECT EXAMINATION.

By Mr. How:

Q. You desired to explain your testimony with regard to the increased value of a lot when it became capable of use as part of a larger tract. Now, I ask you supposing an individual or a corporation needed twenty lots for the purpose of a brewery and it acquired ten of those lots, what effect, if any, would its acquisition of the ten lots out of the twenty that it needed have upon the value of the remaining ten?

A. I would say that they probably got the cheapest ones first, naturally. In further answer to that, I would say that with us in Minneapolis, for a good many years, we have not had what you would call a stable market except for a small part of the property. You take the wholesale district and retail district, I think you could say that values were pretty well established as they are now. The outlying district is to-day held in some cases at less than it was twenty and twenty-five years ago; that is, in some cases. That is so in quite a little of the outlying district and covers quite a territory. There are all sorts of prices on this property, and you can buy property at half or a third of what a conservative person would say was its value. Other people will ask twice what a conservative person would say its value was, and when you speak of buying a few pieces or scattering lots, you can be sure that those lots are the cheap lots that are selling, they are the ones that are picked up first and we haven't got to a stage yet where the property in the outlying district has a stable value or so that you can say that because one lot sells at this, you can buy another lot for that or for the same price, there is a very great variance. And that is one thing that I started to speak of,

because it is quite a factor in this matter and it is why we take so little, comparatively, recognition of certain sales that are made in a certain location, they have very little bearing on what you can buy the next lot for or a bunch of lots. And in your brewery proposition, you might have to pay three or four and five times as much a lot for five of your lots as you did for the first ten.

Q. The fact that the brewery had acquired a part of the lots and had to have the rest, would add to the value?

A. It certainly would. The others would—it is human nature.

Q. Now, I understand that, so far as you could, you assumed the present conditions of Minneapolis excepting for the existence of the Northern Pacific railroad itself; that is, you assumed the existence of other railroads where they are?

A. That they were where they are, yes, sir.

Q. That they were where they are?

A. Yes, sir.

Q. And you assumed that Minneapolis was of the size it is?

A. That it was, at that time, yes.

Q. When you made the appraisal?

A. Yes, sir.

Q. And you think it is larger now?

A. Yes, sir, I hope so.

Q. And you assumed that all conditions were exactly as you found them excepting that the Northern Pacific railroad didn't exist, and there was vacant property where it does exist?

A. That is right.

Q. And you didn't make your valuation upon the theory that there were no railroads there, that there were no wholesale houses there, that there were no mills there and no people there and no money there?

A. No, sir.

RE-CROSS-EXAMINATION.

By Mr. DURMENT:

Q. You have explained certain conditions which you say existed and which you had to take into consideration in fixing these values, and you said, by way of illustrating one condition, that as to outlying property it might happen that you could buy a lot for half what a conservative person would fix as the value of the lot, and yet right in the same vicinity there would be other lots that people would hold at two and three times the price a conservative person would fix the value at?

A. Yes, sir.

Q. In the latter class of cases, where the persons hold those lots or have held them at two and three times what a conservative person would fix the value at, they continued to hold them until there was a considerable increase in the market, didn't they?

A. They are apt to, yes, sir.

Q. That is a holding price and not a selling price?

A. That is so. That is what we run up against whenever we try to buy a bunch.

By Mr. HOW:

Q. Have you ever had any experience with condemnation proceedings?

A. Yes, sir.

Q. And verdicts of juries?

A. Somewhat.

Q. What has that experience been, with regard to acquiring such properties as that, through verdicts of juries at a lower figure than a conservative estimate of their value?

Mr. DURMENT: We object to that as wholly incompetent, and the witness has not shown himself competent to testify. The law requires a jury to find the fair value of the property,

and it is not for this witness to say that they don't, as a rule, do so.

Mr. HOW: I didn't ask him to say so.

The MASTER: Of course the witness will have to answer the question, if he can. The objection is noted.

A. I do not think that is often the case; I haven't known of such.

Q. You mean that it is not often the case that a jury gives a verdict of a lower valuation than a conservative valuation made by owners?

A. I have never known of it, no.

Q. Or made by persons seeking to acquire it rather.

By Mr. DURMENT:

Q. Did you ever, yourself, have occasion to resort to condemnation proceedings to acquire property?

A. No, sir.

Q. Did you yourself ever sit upon a jury which had to fix the value of property in condemnation where it came to a jury trial in a court of this State?

A. I have been on the jury a good many times and I was trying to think—

Q. Did you ever sit upon a jury in a condemnation case where the jury was called upon to fix the value of property taken by a railroad company?

A. Would you call a commission of three in condemnation a jury?

Mr. HOW: No, that isn't a jury.

The MASTER: A proceeding in court.

WITNESS: I don't recall now that I have.

Q. If you did, did you vote to make the railroad pay more than you thought that property was fairly worth?

Mr. HOW: That is objected to; I consider it impertinent; he doesn't recollect—

A. How can I answer it if I say I didn't sit on a jury? I

don't remember it. How could I answer it?

Q. Well, you have assumed to testify as to what the course of juries is in cases of that sort.

Mr. HOW: That is objected to.

The MASTER: It seems to me if it appeared that he ever did sit upon a jury in such cases, there might be more reason for the question, but the fact is he says he never did, as I understand him.

Mr. DURMENT: All right, let it go.

Q. You say you have acted as appraiser, I understand you to say, in condemnation proceedings, where railroads have sought to acquire property?

A. If that is what they call it, a commission of appraisers.

Q. To fix the valuation?

A. Yes, sir.

Q. Has it been your experience that the values fixed by those commissions of appraisers were ordinarily the fair values?

A. We have tried to make them so where I have sat on them.

Q. Has your experience been that commissioners who were selected to appraise the values of properties for railway companies "soak" the railroads by putting exorbitant valuations upon the land?

A. No.

Q. Those you have served on?

A. No, I wouldn't say that. I think it is their custom, and I speak for myself and from my observance, that they—

Q. I am asking those you know of.

Mr. HOW: May the witness answer the question?

Q. Well, I will put in here, I am asking for that which you have actual knowledge of, on the commissions where you have served, and not simply what you have heard about.

A. We have, or I might say I (I can't speak for anyone else) have tried to give a fair value, but in condemnation pro-

ceedings we generally give the benefit of any doubt to the defendant in the case. That is the way I feel.

Q. And that has been true on the commissions where you have served, has it not, that so far as you could judge or determine, the other commissioners sought to fix a fair value?

A. That is generally so, I think, yes, sir.

Q. And, of course, in fixing those values and the damages, you have had to take into consideration other things than the market value, you have had to take in the damage to other property frequently, and things of that sort, have you not?

A. I presume that is likely; I don't remember now.

Q. You don't remember about that?

A. No.

Adjourned until Thursday morning, October 1st.